

Maryland Department of Agriculture Specialty Crop Block Grant

Agreement Number: 12-25-B-1466

Final Report

Submitted: 12/22/2015 Resubmitted: 02/19/2016

Program contact: Karen Fedor

Sr. Agricultural Marketing Specialist

Phone: 410-841-5773

 $Email: \underline{karen.fedor@maryland.gov}$ 



#### FINAL REPORT

Project Title: Eat Fresh Maryland: Increasing Maryland Fruit and Vegetable Sales to WIC Participants at Farmers Markets through an Expanded Statewide Network

### PROJECT SUMMARY

The objective of this project was to increase specialty crop sales to low-income populations throughout Maryland through greater redemption of WIC Fruit and Vegetable Checks (FVC) and Farmers Market Nutrition Program (FMNP) checks at Maryland farmers markets. This goal was pursued through an innovative marketing and outreach initiative directed by Eat Fresh Maryland, a statewide network working to increase food access through federal nutrition benefits redemption at farmers markets.

This project aimed to address two unmet needs: (1) the challenge that specialty crops producers and market managers face in marketing to federal nutrition benefits participants, particularly those using the WIC FVC, and (2) the need to increase fresh, local fruit and vegetable consumption amongst low-income Maryland residents through targeted marketing, education, and financial incentives. All marketing materials, outreach, education, and technical assistance exclusively promoted specialty crops.

Federal nutrition benefits sales are a largely untapped source of revenue for Maryland specialty crop producers. In Maryland, four federal nutrition benefits programs allow vulnerable Maryland families to shop at farmers markets: the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps); Women, Infants, and Children (WIC) and Senior Farmers Market Nutrition Program (FMNP) checks; and the WIC Fruit and Vegetable Checks (FVC). Implementing programs to reach these customers provides additional access to fresh fruits and vegetables to low-income families, additional revenue for farmers resulting from access to new customers, and improves the availability of fresh fruits and vegetables to neighborhoods with limited access to locally grown produce.

This project was particularly timely because of its focus on increasing WIC FVC redemption at Maryland farmers markets. WIC FVC acceptance at Maryland farmers markets was piloted in 2010, but was met with extremely low redemption rates; only 1% of total WIC Fruit and Vegetable Checks redeemed in 2010 were used at farmers markets. With an annual cash value of approximately \$11.1 million, WIC FVC is an underutilized revenue stream for specialty crop producers. Increased redemption of WIC FVC at farmers markets would boost specialty crop sales for participating farmers and draw federal funds into local economy.

The project is a continuation of the "Eat Fresh Maryland" initiative, a network of Maryland farmers markets collaborating to increase sales of fruits and vegetables to federal nutrition benefits clients. Eat Fresh Maryland was launched in 2010 with Maryland Department of Agriculture Specialty Crop Block Grant funding. Specialty Crop Block Grant funding has exclusively been used to promote FMNP and WIC FVC, both of which may only be used to purchase fresh fruits and vegetables, thereby ensuring that only specialty crop producers have benefited from these funds. This round of funding built on existing programming by expanding the marketing campaign based on consumer, producer, and market manager feedback, primarily through growth of the Market to Mealtime point-of-sale nutrition education curriculum.

### PROJECT APPROACH

Project activities were developed to address the challenges that have stood as barriers to WIC FVC use at markets. Specifically, maximizing the benefit of the WIC FVC to Maryland specialty crop producers involves a number of technical, logistical, marketing, and financial challenges. Since WIC participants may use their FVC at any grocery or retail outlet for the purchase of fresh fruits and vegetables, a targeted educational campaign is necessary to inform consumers of the benefits of locally grown produce. Eat Fresh Maryland first launched such a campaign in 2011, to positive response from producers and consumers. Additionally, the WIC FVC requires



farmers to follow a different set of guidelines than for the WIC FMNP, with which they are already familiar. Support from well-informed market managers is necessary for ensuring that specialty crop farmers meet WIC FVC guidelines and receive maximum financial benefit from this program.

To address these needs, Eat Fresh Maryland conducted a multi-tiered initiative, which included: (a) a healthy, seasonal eating marketing campaign at farmers markets tailored to the target audience, and (b) technical assistance for Maryland farmers market managers, who in turn provide support to specialty crop producers at their markets. Project activities took place between January 2013 and September 2014. All marketing, outreach, and educational materials developed with SCBG funds promoted WIC FVC redemption at farmers' markets. These WIC FVC checks may only be used to purchase fresh fruits and vegetables, and only specialty crop producers are authorized to accept them. Consequently, the market-based seasonal eating educational activities exclusively promoted specialty crops sold at Maryland farmers markets.

During the grant period, Eat Fresh Maryland provided technical assistance to 26 partner markets, which varied in degree of involvement based on the individual market manager's level of need. For example, some market managers required basic information to better understand the details of the FVC program and how it is distinguished from the Farmers Market Nutrition Program, which was already in use at all participating markets. This deeper understanding of the programs helped market managers bring greater clarity to consumers and producers alike, thereby increasing accessibility and utilization of these market currencies. Other market managers already understood the program and sought support in working with local agencies, such as WIC and other community partners, to ensure that the FVC benefits were being redeemed at their markets. Virtually all partner managers sought assistance with data collection and how to effectively and efficiently gather require sales data from the farmers at their markets.

Outside of individualized technical assistance, which took place through in-person visits, phone meetings, and email, Eat Fresh Maryland convened a series of partner meetings during the grant period. These included:

- Webinar presentation of 2012 market season Eat Fresh Maryland data on federal nutrition benefits redemption, successes, and best practices in January 2013, with participants from 17 partner organizations;
- In-person Eat Fresh Maryland partners meeting for 20 attendees in February 2013 in conjunction with the Maryland Department of Agriculture's annual Farmers Market Conference, which included a feedback and evaluation session of the 2012 season, presentation of proposed marketing strategies for the 2013 season, and a breakout with University of Maryland Extension Food Stamp Nutrition Educators to evaluate and plan for Market to Mealtime;
- In-person partners meeting in April 2013 with 20 participants, in partnership with Maryland Hunger Solutions and the Baltimore Farmers Market Collaborative;
- Development of a data collection tool and end-of-season survey for partners to submit 2013 data and feedback on network offerings;
- Ongoing marketing throughout the 2013 farmers market season (May-November);
- Mid-season partners meeting with 15 attendees in June 2013;
- Presentation on Eat Fresh Maryland at the National Association of Farmers Market Nutrition Programs annual conference, held in Baltimore, MD in October 2013:
- Distribution of end-of-season survey and revised data collection tool to 34 partners in December 2013;
- Pre-season meeting with 25 attendees in February 2014;
- Outreach and planning meeting with 20 participants in April 2014 to discuss 2014 marketing materials and distribution strategy;
- 17 mid-season market visits in July 2014 to provide technical assistance and marketing support; and,
- End-of-season partners meeting in October 2014, with 20 attendees.

We also created a listsery for program partners, with the objective of reaching all program partners with one email, thereby allowing for collective input around problem-solving and identifying promising practices.



Additionally, MDFMA's website includes a "Find a Market" tool that enables consumers to search for a market near them that accepts federal nutrition benefits and offers incentives.

Further, all twenty-six partners received and distributed Eat Fresh Maryland branded marketing materials promoting use of FVC at Maryland farmers markets. These materials included: tri-fold color brochures, 11x17 posters, pamphlet inserts for inclusion in standard WIC materials, and DVDs featuring a seven-minute bilingual (English/Spanish) video about how to use federal nutrition benefits at market. Eat Fresh Maryland provided support to all markets in developing a distribution and outreach plan, as discussed in the earlier technical assistance section. In 2013, Eat Fresh Maryland partnered with the Maryland Department of Human Resources, the Farm Alliance of Baltimore, Maryland Hunger Solutions, and the Maryland Department of Agriculture on a statewide mailer to federal nutrition benefits participants promoting WIC FVC and FMNP at farmers markets. Outreach was coordinated with WIC clinics throughout Baltimore City located near partner farmers markets and provided WIC staff with materials to distribute to their clients. In 2014, the statewide mailer (first done in 2013) was sent and reached 70,000 low-income Maryland households with bilingual English/Spanish marketing materials.

In 2013, Baltimore Bucks was a program to increase the purchasing power of customers with federal nutrition benefits by offering a dollar-for-dollar match up to \$5 per customer at each participating market. Maryland Hunger Solutions (MDHS) managed the Baltimore Bucks program during the 2013 market season and raised the matching incentive funding for the majority of the markets in the program. This Specialty Crop grant did not provide funding for the administration of Baltimore Bucks program or for the incentives. Eat Fresh Maryland collaborated with MDHS on outreach and communication, and we successfully reached and distributed materials to 11 community centers, senior communities, and schools, which resulted in an overall total of 35 new customers who spent their federal nutrition benefits and were able to take advantage of such matching programs.

In 2014, we continued our partnerships with these institutions during the transition of Baltimore Bucks to Maryland Market Money. During this time, we partnered with the WIC office on Johns Hopkins' campus to promote Maryland Market Money to their clients and in the neighborhood by distributing materials and planning a one-day promotional event for Johns Hopkins Community Market. "Healthy Habits at Hopkins" sought to increase redemption of federal nutrition benefits using incentives such as giveaway prizes to WIC clients and raffles in addition to the distribution of Maryland Market Money. The promotional event resulted in a 57% increase of Maryland Market Money distribution. Throughout the season we continued outreach strategies by connecting with 12 community organizations, libraries, and schools, including health fairs. Our efforts resulted in a total of 342 new customers that spent federal nutrition benefits (an 89% increase from 2013) contributing to \$2,667 Maryland Market Money dollars distributed through the institution markets.

Lastly, Eat Fresh Maryland invested in ongoing improvements to and maintenance of our online presence, including website and social media, to ensure that Eat Fresh Maryland is a source of reliable, accurate, thorough information for specialty crops producers and WIC FVC participants. Information on Eat Fresh Maryland has migrated to the website and Facebook pages for the Maryland Farmers Market Association, which can be accessed at <a href="http://www.marylandfma.org">https://www.facebook.com/Marylandfma.org</a> and <a href="https://www.facebook.com/Marylandfma.org">https://www.facebook.com/Marylandfma.org</a>

As the second part of this marketing campaign promoting specialty crops to WIC and FMNP participants, Eat Fresh Maryland collaborated with University of Maryland Extension's Food Smart Team to develop a healthy, seasonal eating marketing campaign for use at farmers markets. The goal of this initiative was to increase access to and consumption of local fruits and vegetables in Maryland communities through the development and use of a comprehensive toolkit for consumer outreach and education. Specific project activities included: 1) Creation and dissemination of a toolkit of outreach and educational materials for consumers, particularly targeting WIC FVC recipients, including promotional materials, farmers market demonstrations, etc. addressing fruit and vegetable selection, storage, safety, and preparation, 2) Trainings for UME staff, market managers, and community volunteers to use the toolkit and implement these programs at Eat Fresh Maryland partner markets statewide and; 3) data collection from program participants to measure metrics including individual willingness to try new recipes, increased fruit and vegetable consumption as a result of education received and type of currency



used to make purchases (credit/debit, SNAP, FMNP, FVC, or incentives). Specifically, the nutrition education program at markets featured a large display educating consumers about selecting, storing, and safely preparing a different Maryland-grown fruit or vegetable each month. Two-sided recipe cards featuring one raw and one cooked low-cost, easy recipe were distributed to market shoppers. In the original grant proposal, \$1,000 was allocated for UME to produce display boards, recipe cards, and supplies for this initiative. UME was able to fund these materials without SCBG funds. Crossroads therefore reallocated the funding to MDFMA for additional marketing materials and technical assistance for this project.

Market to Mealtime evolved from a need identified after Eat Fresh Maryland's pilot season by partner market managers and specialty crop producers selling at participating markets to educate shoppers, particularly federal nutrition benefits participants, about ways to cook local, seasonal fruits and vegetables with which they are unfamiliar. Recent studies have indicated that availability of fresh and/or local foods alone does not lead to increased fruit and vegetable consumption; well-developed, culturally appropriate educational programming is essential to inform shoppers of both the why's and how's of eating fresh, local produce.

Notably, while the SCBG program did not fund financial incentives for FMNP or FVC during this grant period, MDFMA was committed to continuing the successful WIC FVC incentive program in Baltimore launched in 2013. During the 2013 season, Baltimore's incentive program ("Baltimore Bucks") was still under the auspices of Maryland Hunger Solutions (MDHS), working in close partnership with the MDFMA. MDFMA and MDHS were thrilled that the pilot program yielded unexpectedly positive outcomes and collaborated to secure non-SCBG funding to provide WIC FVC incentives at participating Baltimore markets in 2013. In 2014, Baltimore Bucks was incorporate into the broader statewide Maryland Market Money program and MDFMA assumed total responsibility for funding the program for that season, which it did successfully. MDHS remained involved as a collaborator, primarily assisting with marketing and promotion to federal nutrition program participants (as outlined in the paragraph below).

The primary collaborators on this project were the Family League of Baltimore, the Baltimore Partnership to End Childhood Hunger, University of Maryland Extension (UME) Food Supplement Nutrition Education Program (FSNE) and Maryland Hunger Solutions (MDHS). UME's Food Smart team brought their nutrition expertise to the development of the Market to Mealtime curriculum, ensuring that the recipes and displays provided customers with valuable, healthful information. MDHS was instrumental in disseminating Eat Fresh Maryland marketing materials to partner farmers markets in Baltimore and in building relationships with local social services agencies that distributed our materials to their clients.

### GOALS AND OUTCOMES ACHIEVED

1) The first goal of this project was to increase specialty crop sales through a multi-dimensional marketing, outreach, and incentive campaign at minimum 30 farmers markets throughout Maryland. We anticipated that reported WIC FVC sales in 2013 would increase by 25% over 2012. To reach this goal, Eat Fresh Maryland undertook a major marketing campaign, as outlined above, working on the state and community levels to encourage federal nutrition benefits participants to redeem their assistance dollars at farmers markets. During the grant period, 26 markets participated in the meetings and availed of the programs and materials offered; more than 34 markets were featured on the Eat Fresh Maryland materials. Over the two market seasons, we distributed over 27,000 units of mixed media promotional materials, including: flyers, 11x17 posters, tri-fold brochures, Eat Fresh Maryland DVDs, point-of-sale banners, and WIC check booklet and brochure inserts.

According to data reported from Eat Fresh Maryland partners in 2012, \$30,612 in WIC was redeemed at partner markets that season. In 2013, partners reported \$12,732 in WIC FVC sales; in 2014, partners reported \$10,383 and \$30,905 in WIC and Senior FMNP. Based on reported FVC and FMNP sales, this program directly resulted in \$54,020 for Maryland specialty crops producers. These figures do not reflect: specialty crop sales at Maryland markets not reporting data but included on Eat Fresh Maryland promotional materials; specialty crop purchases that WIC and FMNP and/or Market to Mealtime participants made using other currencies (cash, credit/debit, SNAP benefits), and sales from specialty crop producers who opted not to report data. This outcome



is discussed further in the Lessons Learned section of the report.

2) The second goal of the project was to increase the distribution of Eat Fresh Maryland promotional and educational materials by adding a minimum of ten new partner markets, totaling more than 40 participating markets in at least eight Maryland counties by 2013. During this grant period, the MDFMA was launched as an independent non-profit and assumed responsibility over Eat Fresh Maryland (formerly a program of Crossroads Community Food Network). Eat Fresh Maryland members are therefore now MDFMA members from whom we have received partnership agreements and dues. As of September 2014, there are 41 MDFMA members in 13 Maryland counties and Baltimore City. Promotional and educational materials were distributed to potential Maryland Market Money participants through partners, who utilized their local networks to disseminate information within their communities.

3) An additional performance measure was tracking the number of participants in the seasonal eating curriculum. In 2013, Eat Fresh Maryland volunteers offered the Market to Mealtime curriculum 17 times at seven Baltimore City farmers markets, at which 456 shoppers received materials and spoke at length with the Market to Mealtime volunteers about the program. Additionally, Eat Fresh Maryland facilitated Market to Mealtime programming at two Baltimore City farmers markets in celebration of Food Day (October 24), in collaboration with the Baltimore Partnership to End Childhood Hunger. UME is still in the process of collecting reports on the 2014 market season. However, data received to date includes 11 visits to four Baltimore City markets, benefiting 248 market customers.

The Baltimore Partnership to End Childhood Hunger and the Family League of Baltimore worked closely with Eat Fresh Maryland to recruit, train, and manage volunteers to implement the Market to Mealtime program. In 2013, 3 training sessions were held to train a total of 12 volunteers. In 2014, 4 training sessions were held to train 14 volunteers and 3 Maryland Farmers Market Association staff members. Volunteers were trained by UME staff members to discuss talking points including eating fruits and vegetables at each meal, the importance of buying locally grown items, and involving children of different ages in meal preparation.

#### BENEFICIARIES

This project was particularly innovative and impactful as it aimed to produce benefit to a broad range of beneficiaries; namely, specialty crop producers, farmers market managers, and low-income Maryland consumers all directly benefited from this project. Numbers of beneficiaries included:

- Approximately 200 Maryland specialty crop farmers selling at Eat Fresh Maryland/MDFMA partner markets throughout the state
- Minimum 26 Maryland farmers market managers; and,
- Minimum 3,072 low-income Maryland households, equaling an estimated 10,000 low-income individuals.

#### LESSONS LEARNED

To measure progress, we had projected a 25% increase in WIC FVC redemption from 2012 to 2013. However, collecting accurate data proved challenging. WIC FVC and WIC and Senior FMNP benefits are paper checks that participants spend directly with individual producers, who then deposit them as they would a personal check. As such, all FVC and FMNP sales data is based on figures that producers report to market managers for submission to Eat Fresh Maryland. Though Eat Fresh Maryland staff worked extensively with market managers to solicit feedback for streamlining data collection and sought to optimize the process for producers and managers while also enabling us to meet reporting guidelines, the multistep process remained cumbersome and was adhered to with varying degrees of stringency. Obstacles to accurate data therefore included: reticence on the part of producers to report sales figures, provide an exact count, and/or to distinguish between FVC and FMNP sales; limited capacity for market managers to go to every market farmer each week to record weekly sales; and difficulties enforcing market managers to collect and submit complete sales records on a timely basis.

Recognizing those limitations, 2013 and 2014 data may not reflect the full success of the program. Two



important considerations are required to understand these figures. First, as noted in the above paragraph, these data likely conflate sales of FVC and FMNP. Specifically, in 2012, when farmers were less familiar with the new FVC check, they likely reported all WIC checks as one type of currency; consequently, the 2012 WIC FVC figures likely include sales of both FVC and FMNP, explaining the significant leap in FVC sales we experienced from 2011 to 2012 (over 500%) and the subsequent dramatic reduction. Second, in 2012, Eat Fresh Maryland received Specialty Crop Block Grant (separate from this grant) funding to offer financial incentives in dollar-value vouchers to match purchases with WIC FVC at participating Baltimore City and County farmers markets. During the 2012 market season, Eat Fresh Maryland distributed \$18,932 in incentive vouchers. In writing this grant proposal, we had anticipated that, even without funding through this grant for incentives, the initial success of the incentive program would result in continued high rates of WIC FVC redemption. However, as noted and explained above, the rate of WIC FVC sales declined (at least per reported figures).

This grant period offered invaluable lessons for navigating the challenges of marketing locally grown specialty crops to low-income consumers. Evaluation of the third and fourth seasons of Eat Fresh Maryland highlighted both the value of a centralized marketing program and areas for continued improvement. Primary lessons are as follows:

- 1) Collaborative, streamlined marketing strengthens farmers markets statewide by minimizing the burden on overextended market managers, many of whom are also farmers and/or operating the market as part of another job. Though not quantified in the program's impact, frequent anecdotal feedback from market managers, producers, and consumers throughout the grant period reinforced the underlying assumption behind this program: there is tremendous need for and value in a single, streamlined entity to oversee a marketing campaign, which neither farmers nor market managers have capacity to run without support. Further, that market managers were willing to comply with our tedious data reporting requirements without any financial compensation demonstrates that they saw significant value participation in the network, and that their market was stronger from the resources Eat Fresh Maryland provided.
- 2) Low-income households are interested in eating fresh, locally grown produce and are a potential customer base typically overlooked by specialty crops growers. The data shared throughout this report support our strong belief that low-income Maryland households want to eat fresh, healthy, high-quality locally grown foods, and will do so when such foods are made more accessible; namely, when they are aware of where to purchase such foods, that they may purchase these foods with their benefits, and with educational support around produce selection, storage, and preparation. Eat Fresh Maryland is committed to continuing its work to promote locally grown produce to WIC families, developing outreach models mutually supportive of consumers and producers.
- 3) Education at point-of-sale creates a stronger farmers market by fostering a welcoming and informative space for consumers and potentially increasing sales for producers.

  Implementing Market to Mealtime at partner markets allowed for unique opportunities to increase sales for producers through the redemption of federal nutrition benefits. Market to Mealtime volunteer trainings included information about federal nutrition benefit redemption at market, allowing volunteers to tailor their interactions with program participants to include information on how to redeem and stretch their benefits with incentives as available at select partner markets.

  Providing nutrition education at partner markets continues to be a high priority of the Eat Fresh Maryland network. Nutrition education is one of the most requested programs from market managers. Market to Mealtime is implemented by volunteers who are often members of the markets' community. This provides the opportunity to cultivate communities within farmers markets, allowing markets to serve as a community resource for healthy, local, nutritious food options and nutrition education.
- 4) Financial incentives are an evidence-based practice for increasing redemption of federal nutrition benefits at farmers markets to purchase specialty crops. Whereas redemption of WIC FVC increased exponentially (over 500%) over the previous season when Eat Fresh Maryland introduced incentives through an earlier Specialty Crop Block Grant separate from this one, redemption rates slowed



significantly when funding for incentives was absent. This data is consistent with nationwide trends, as published by the national non-profit organization Wholesome Wave, indicating the impact of incentive programs on farmers market sales. This may be something that MDA – as the administrator of the Specialty Crop Block Grant in Maryland – may want to reconsider funding in the future as it has a significant impact on purchasing of specialty crops. To reiterate, no incentive funding was provided through this Specialty Crop Block Grant, even though it was included in the original proposal. As a corollary, this project demonstrated that:

- 5) Shifting purchasing and consumption patterns takes time. While we remain convinced that low-income households want to eat healthy, high-quality food—and are deserving of such—behavioral change is a gradual process. Barriers to access and affordability create added challenges for individuals and households with lower-incomes. Consequently, organizations, market managers, and producers marketing to low-income consumers must not conflate low or stagnant sales with lack of interest, and must continue to explore and implement vetted and effective outreach and marketing strategies. Further, these organizations should intentionally engage members of the target audience in program and marketing design to ensure maximum appropriateness, relevance, and effectiveness. Lastly, relationships with community-based organizations and social services offices are instrumental in reaching this population. For example, our strategic partnerships with state and local WIC and community organizations have been vital in helping us distribute the materials to WIC participants, inform them that the FVC can be used at farmers markets, and educate them about the benefits and importance of eating locally.
- 6) Streamlined data collection is essential for evaluating program impact.

  The challenge of obtaining WIC FVC sales data from specialty crop growers remained a factor throughout this grant period. WIC FVC is a paper check based program, transactions occur directly between shopper and producer, rather than through a market manager (as with SNAP sales).

  Consequently, we are relying both on farmers to self-report to the market managers and on market managers to put forth the effort to collect the information from each individual farmer and then provide weekly sales and transaction data to Eat Fresh Maryland. We continue to dedicate significant staff time to refine and improve data collection systems, working closely with MDA, Maryland Hunger Solutions, and Eat Fresh Maryland partner market managers to verify the accuracy of our data and ensure that our protocol is usable for all relevant parties.

### **CONTACT PERSON**

Amy Crone Executive Director, Maryland Farmers Market Association <a href="marylandfma.org">acrone@marylandfma.org</a> 410.929.1645

#### ADDITIONAL INFORMATION







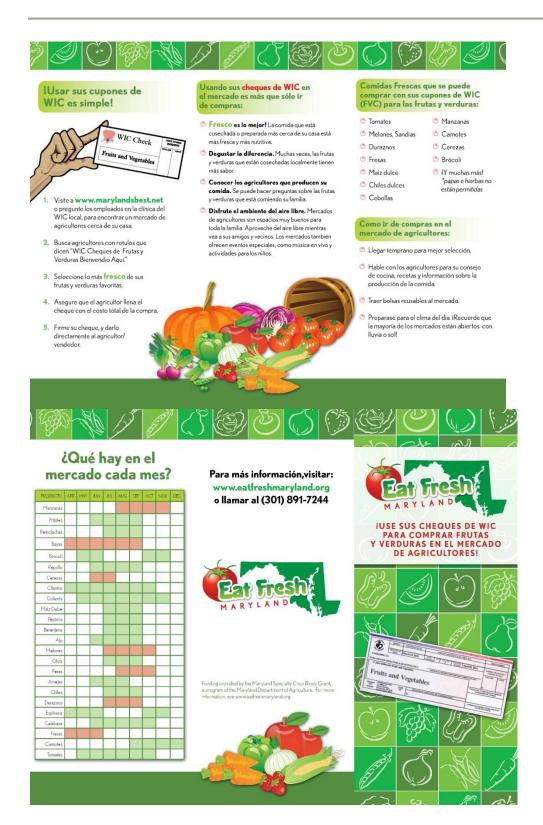
Use su WIC en el mercado de agricultores!







This poster is based on work supported by the Farmers' Market Premotion Program Grant Program, Agricultural Marketing Service, USDA, under Armad No. HD-882-2010-G-1160, as well as Maryland Department of Agriculture's Specialty Crop Block Grant. Any opinions, findings, conclusions, or recommendations





#### FINAL REPORT

Project Title: Expanding Specialty Crop Use through Promotion of Culinary Heritage

#### PROJECT SUMMARY

According to a 2011 report funded by Southern Sustainable Agriculture Research & Education (SARE), Appalachia has been identified as the most diverse 'foodshed' in North America, with nearly 1,500 documented folk and indigenous crop varieties of heirloom vegetables and fruits. Garrett County lies in the Appalachian Mountains of Western Maryland, and the growing conditions there (climate, topography, and geography) are very different than the rest of the state. Because of this, certain specialty crops have been traditionally easier to grow and therefore are more profitable for farmers in Garrett County. For instance, in most years, cool summers in Garrett County provide farmers the luxury of growing berries, lettuces, greens, broccoli, cabbage, and other Cole crops during the hottest part of the summer. Garrett County also has a large tourist population in the summer, and those tourists generally come from areas of Maryland and surrounding states that have warmer climates. These potential customers do not know that Garrett County specialty crop growers have an abundance of fresh produce items that may not be available from farms near their homes. Potential sales are lost because of this disconnect: customers' not knowing what is available in Garrett County, and when it is available.

This project addressed a need to promote specialty crops through the unique culinary heritage of the area. Each region in Maryland has different topography, geography, and climate. Because of these issues, each region in Maryland has farmers who grow different historically and culturally significant foods. In order for the foods that are adapted to grow well in each region to be able to be sold to customers, those customers must become familiar with the foods, how the foods are prepared, cooked, stored, and eaten. This project assessed the local food heritage of our area, developed a local foods guide, and developed a culinary heritage event which can be replicated in different regions in Maryland celebrating different specialty crops.

The objectives of this project were:

- 1. Increase awareness by the public of culinary heritage and specialty crops availability;
- 2. Develop a local food guide to highlight availability of culinary heritage and specialty crops;
- 3. Develop a culinary heritage event to highlight specialty crops;
- 4. Develop a guide for other jurisdictions to be able to replicate the local food guide and culinary heritage event.

The importance of this project cannot be overstated. As the local food movement grew in urban areas in the past 15 years, rural areas have struggled to grow similarly. Small, diversified farms in Garrett County's mountains cannot compete with the available land base, marketing dollars, and labor in the agriculture centers in Maryland. A large majority of the visiting population, along with many local citizens, were unaware of the local specialty crops available in Garrett County. This project both



educated the public about specialty crops available in Garrett County and motivated them to purchase those specialty crops from local farms.

### PROJECT APPROACH

Activities and tasks performed during the grant period:

- 1. Hire contractor to coordinate research and development of local foods guide, coordinate culinary heritage event, and develop the guide to hosting a culinary heritage event.
  - a. After three applications were received and reviewed following the contractual position announcement, Hana Crouch was hired to perform these duties. Ms. Crouch worked closely with Cheryl DeBerry, Natural Resources Business Specialist for Garrett County Economic Development, to ensure a successful project completion.
- 2. Research availability of specialty crops
  - a. Documents provided by a local fresh produce marketing cooperative, Garrett Growers Cooperative, Inc., were reviewed to determine the availability of specialty crops in Garrett County.
  - b. Growers of specialty crops that attend farmers markets, have roadside stands, sell at the local produce auction, and who take orders for farm sales were contacted about potential inclusion in the local foods guide. Each grower that wished to be listed provided information to Ms. Crouch, including what specialty crops they grow, when and where those specialty crops are available, contact information for the farm, and photos of the farm and/or products.
- 3. Draft of local foods guide to committee
  - a. The draft was completed by mid-July, 2013.
- 4. Editing and approval of local foods guide
  - a. The final local foods guide was ready in early August, 2013.
- 5. Publish local foods guide
  - a. The local foods guide was printed and delivered by August 9, 2013.
  - b. The local foods website was created and went "live" in September 2013.
- 6. Conduct post survey of local businesses
  - a. Specialty Crop farmers who participated in the local foods guide (both the printed and online versions) were informally surveyed at various events in the county where they were in attendance, as well as through email and personal interviews. In all, over 20 specialty crop farmers provided substantive feedback about their inclusion in the local food guide. The overwhelming response was positive, with 12 farmers indicating they have increased sales of specialty crops and 21 who increased contacts with potential buyers of specialty crops.
- 7. Plan for culinary heritage event
  - a. The contractor worked with the planning committee to plan all aspects of the event, including logistics, marketing, coordinating volunteers, soliciting sponsors to cover non-specialty crop related items, and securing vendors.
- 8. Conduct culinary heritage event and post-survey



- a. The culinary heritage event was held August 10, 2013, at the Garrett County Fairgrounds. It included several activities, as can be seen in the "Goals and Outcomes Achieved" section of this report.
- 9. Draft guide to hosting a culinary heritage event' to committee
  - a. The guide was first drafted in the spring of 2014, and final editing was conducted in September and October of 2014.
- 10. Editing and approval of 'guide to hosting a culinary heritage event'.

a.

- 11. Publishing and email distribution of 'guide to hosting a culinary heritage event' as an Adobe .pdf document
  - a. The guide is <u>online</u>. No pdf version is required, as the website allows for more information in a user-friendly format for all types of devices.

Because the culinary heritage event and local foods guide included all farm products produced in Garrett County, this project did benefit some non-specialty crop farms. For example, the event and guide includes locally produced meats, fiber, cheese, wheat, wine, beer, corn, and hay. Because of this, the committee made sure to solicit non-grant sponsorships and advertising revenue to offset any and all non-specialty crop promotions. For instance, in the local foods guide, advertising pages paid for each non-specialty crop farm listings, and at the culinary heritage event, sponsorships paid for each non-specialty crop farm promotions.

Grant funds were used to solely enhance the competitiveness of specialty crops. In promotions for the Serve It Up Local event such as posters and press releases, only specialty crops, specifically fresh vegetables, were pictured. In instances where both specialty crops and non-specialty crops were pictured or featured (e.g., the website, the dinner, etc.), program income funds (from sponsorships and ticket sales) were used for the appropriate portion of the costs.

### **Garrett County Economic Development**

Cheryl DeBerry served as project coordinator and provided assistance in all aspects of this project.

- Oversaw the hiring of and supervision of the consultant
- Assisted in marketing, including social media campaign, logo/advertising design and placement, drafting press releases, etc.
- Designed and edited the local foods guide printed version
- Designed the local foods guide website
- Solicited sponsorships and advertisers
- Prepared grant reports and ensured grant compliance

Michael Koch provided expertise in project management, marketing planning and logo design.

### **Board of County Commissioners**

The Finance Office provided all bookkeeping and accounting services for this project.

### **University of Maryland Extension**



Staff served on all committees, assisted in editing documents and websites, and assisted in sourcing local specialty crops.

### **Garrett Growers Cooperative, Inc.**

Members shared information about availability of specialty crops in Garrett County and participated in the local foods guide and culinary heritage event.

### **Mountain Fresh Producers Association**

Members worked with the project coordinator to promote specialty crops at the farmers markets, aided in sourcing specialty crops for the project, and provided information about specialty crop growers for inclusion in the local foods guide and culinary heritage event.

### **Garrett County Chamber of Commerce**

Staff provided marketing assistance by promoting the culinary heritage event and allowing the local foods guide to be distributed in the two visitor's centers in Garrett County.

### **Garrett Preston Rural Development Coalition**

Member Joyce Bishoff served on the project committee and provided valuable assistance in project development, event planning, event promotion, etc.

### GOALS AND OUTCOMES ACHIEVED

Objective 1: Increase awareness by the public of culinary heritage and specialty crops availability

Though difficult to gauge the increase in awareness by the public, there are a few things we have observed that point to that end:

- An additional nine retailers/restaurants began purchasing specialty crops through the Garrett Growers Cooperative of fresh produce growers in 2013
- People from four states: Maryland (Bowie, Middletown, Pasadena, Rockville), Washington, D.C., West Virginia (Bruceton Mills, Masontown), and Pennsylvania (Pittsburg, Harrisburg, Spring House), attended the culinary heritage event.
- The culinary heritage event's facebook page has 311 'likes' and had over 15,500 people reached with its posts (duplicates included) during the grant period.
- The culinary heritage event's twitter page has 111 followers
- The Garrett farms facebook page has 201 'likes' and had over 660 people reached with its posts (duplicates included) in just over one month.
- The Garrett farms recently-added twitter page has 26 followers
- 162 people attended the lunch event at the culinary heritage event



- 47 people attended the social at the culinary heritage event
- 76 people attended the local foods dinner at the culinary heritage event
- Total attendees: 285

Grant funds were used to solely enhance the competitiveness of specialty crops. In promotions for the Serve It Up Local event such as posters and press releases, only specialty crops, specifically fresh vegetables, were pictured. In instances where both specialty crops and non-specialty crops were pictured or featured (e.g., the website, the dinner, etc.), program income funds (from sponsorships and ticket sales) were used for the appropriate portion of the costs.

2012 Sales of Specialty Crops at Farmers Markets: \$109,601

2013 Sales of Specialty Crops at Farmers Markets: \$142,063

§ 30% increase over 2012

2014 Sales of Specialty Crops at Farmers Markets: \$136,664

§ 25% increase over 2012

Objective 2: Develop a local food guide to highlight availability of culinary heritage and specialty crops

2,500 copies of the first "Local Food & Farm Guide" were printed in early August, featuring listings of farmers markets, farm stands, farms, and other sources of local specialty crops. The guide is available at rental homes, Garrett County Courthouse, two visitor's centers in Garrett County, Garrett County Courthouse, University of Maryland Extension, Mountain Fresh Farmers Markets, and other small businesses in Garrett County.

The online, expanded version of the "Local Food & Farm Guide" was published in September 2013 (<a href="www.GarrettFarms.org">www.GarrettFarms.org</a>) with search capabilities, comprehensive farm listings, news and updates, and agritourism sites. Consumers can search for farms by specialty crop.

As of November 2014, there were only approximately 250 "Local Food & Farm Guides" left, and plans are being made to update the guide and reprint using secured funding from the Garrett County Office of Economic Development and advertising revenue.

Grant funds were used to solely enhance the competitiveness of specialty crops. In the 40-page Local Food and Farm Guide, approximately 15% of the guide refers (in photos or text) to either non-specialty crop farm products, other farm ventures (agritourism, wool/fiber, etc.) or farms located in adjoining states that may or may not sell specialty crops. Because of this, ads were sold to offset those pages of the booklet. Almost 13 pages of ads (30% of the guide) were sold to offset these non-specialty crop references in the Local Food & Farm Guide.



# **Objective 3:** Develop a culinary heritage event to highlight specialty crops

- The "Serve It Up Local: Celebrating Farms and Food" festival was held August 10, 2013 at the Garrett County Fairgrounds Ag Heritage Hall in McHenry.
- The festival started with a "Local Foods Cook Off & Lunch Extravaganza", where area chefs prepared samples of specialty crops cooked in unique ways for the public to consume.
- After lunch, the "Local Food & Farm Fest" featured area farmers selling their products, live music, kids' activities, educational displays about local specialty crop production history, and specialty crop foods cooking demonstrations.
- In the evening, regional wines and beers were sampled during the "Local Sips Social", followed by the "50-Mile Meal: A Local Foods Dinner" featuring celebrated Farm-to-Table Chef, Spike Gjerde from Woodberry Kitchen in Baltimore.
- Grant funds were used to solely enhance the competitiveness of specialty crops. Sponsorship and ticket sales revenue for the culinary heritage event supplemented the grant funds to cover any references in advertising or promotions to non-specialty crop items, such as the references to other locally produced farm items such as wool, wine, beer, eggs, cheeses, and meats.
- **Objective 4:** Develop a guide for other jurisdictions to be able to replicate the local food guide and culinary heritage event.
  - The guide is posted on the Culinary Heritage Event website and has been promoted via social media and the Garrett Farms webpage. The availability of the guide is promoted via events and email lists throughout Maryland.
  - Unfortunately, because our guide is a page on our website and not a downloadable file (for ease of access and use by viewers), we can only go by page views for statistics. Our website host only makes available the most recent month's data, so we are unable to ascertain how many views the guide page has had since posting. We did, however, post a link at the top of the webpage and also posted it in the news blog of the <a href="https://www.ServeItUpLocal.com">www.ServeItUpLocal.com</a> and <a href="https://www.GarrettFarms.org">www.GarrettFarms.org</a> websites to increase the reach.

Grant funds were used to solely enhance the competitiveness of specialty crops. The guide will feature only specialty crops in examples, photos, and other references in the text.

# **Contributions and roles of project partners**

- 1. Garrett County Economic Development
  - a. Cheryl DeBerry, Natural Resources Business Specialist provided technical support to the hired coordinator for the project. This included eight face-to-face meetings, 12 phone meetings, and numerous email replies. In addition, Ms. DeBerry did all the design work for the Local Food Guide, designed both the culinary heritage event website and the Garrett Farms website, created and updated both facebook and twitter pages, and designed all ads for

the culinary heritage event. The accumulated value of this time expended is well over \$2,000.00.

- b. Michael Koch, Director provided technical support to the hired coordinator for the project. This included five face-to-face meetings, two phone meetings, and numerous email replies. The accumulated value of this time expended is well over \$500.00.
- c. Planning & Land Development Department provided free use of a large plotter printer for printing twelve oversized posters for the event. The value of this donation is well over \$200.00.
- 2. University of Maryland Extension Garrett County Office
  - a. Various staff members assisted in printing brochures, flyers, and rack cards, folding brochures, cutting rack cards, mailing invitations, and providing general office support. The accumulated value of this time expended is well over \$50.00.
- 3. Firefly Farms Creamery and Market
  - a. Firefly Farms staff sold tickets to the event as well as provided assistance with the procurement of regional beer and wine and provided volunteers for the social at the culinary heritage event. The accumulated value of this time expended is well over \$100.00.

# Progress toward achieving the Expected Measurable Outcomes

Baseline data gathered: In a Pre-Event Survey of restaurants conducted February through April 2013:

Do you think it would be realistic for your establishment to increase its purchase of local food by at least 10% within the next year?

75% of respondents replied "Yes"

25% of respondents replied "No"

Progress toward achieving set targets: In a Post-Event Survey of restaurants conducted October through November 2013:

(1) Has your establishment increased its purchase of local food this season (2013)?

100% of respondents said "Yes"

71.4% of respondents estimated an increase of at least 10%

42.9% of respondents estimated an increase of 3-10%

57.1% of respondents estimated an increase of >10%

(2) Do you think it is realistic for your establishment to increase its purchase of local food 10% by the end of next season (2014)?

100% of respondents said "Yes"

A qualitative outcome of note is that event organizers feel that the process of planning and executing a successful event involving local restaurant participants built rapport and resulted in a working relationship that will make it easier to engage them on this issue and in future endeavors.



In a survey of area restaurants, respondents perceived five major obstacles to sourcing local food. Of fourteen potential obstacles outlined in the survey, over half of respondents "Agree" or "Strongly Agree" with the following five issues:

- 1. It is too time-consuming to source ingredients locally (57.14%)
- 2. It is too complicated to coordinate with farmers (57.15%)
- 3. It is easier to buy all ingredients through my distributor (71.43%)
- 4. Variety of local food is too limited (57.15%)
- 5. Availability of local food is too seasonal (71.43%)

This feedback suggests priority issues to be addressed by future projects. Issues 1-3 are being actively addressed by Garrett Growers Cooperative, a farmer-owned marketing cooperative purveying locally grown specialty crops. Projects to enhance the capacity of this organization would likely be the most efficient and effective way to address issues one through three. Issues 4 & 5 could both be addressed by projects to increase the use and effectiveness of season extension techniques by local farmers. The seasonal availability of local foods causes farmers and marketing cooperatives like Garrett Growers to have to expend extraordinary effort on an annual basis to recapture the attention of their market, as well as lessens restaurants' ability to capitalize on their purchase of local food through marketing. Increased year-round sales would save farmers a lot of time and hassle during the busy start of each season, and create a more robust local food economy. Season extension infrastructure (including food processing facilities) used to extend the growing season into wintry months could be used during the peak season to expand variety.

### **BENEFICIARIES**

Specialty crop farmers in Garrett County directly benefitted from this project, including the 39 fresh produce farmers who sold \$329,000 in products in 2012 at farm stands and through farmers markets, produce auctions, wholesalers, and cooperatives. At the Mountain Fresh Producers Association Farmers Market in Oakland, sales increased in 2014 to 260,729, a 35% increase from 2012 sales of \$193,513. Garrett Growers Cooperative, Inc., a fresh produce marketing cooperative of 11 specialty crop farmers selling to restaurants and grocers, increased sales in 2014 to \$50,775 over 2012 sales of \$28,084, an increase of 81% in two years.

#### LESSONS LEARNED

A major lesson learned is that specialty crop farmers are hard-working, intelligent entrepreneurs who get amazing amounts of work done, but they often lack the time or skills for effective marketing. This project attempted to help expand markets for specialty crops in Garrett County, by assisting with some of the marketing.

One unexpected outcome is that the chef at one of the participating restaurants, MoonShadow Café in Accident, decided to host its own local foods dinner in August 2014. Specialty crop farmers provided most of the foods for the event. The dinner was held during regular restaurant hours, so customers with tickets got the local food dinner, while walk-ins were expecting to order from the menu. This caused confusion among customers. So a lesson learned is that next time, the event should happen either off-site or on-site but outside regular restaurant hours (e.g., a Sunday brunch).

Another unexpected outcome is the amazing amount of fresh produce local restaurants consume – our small specialty crop farmers are unable to meet full demand, even in peak season. So restaurants must balance ordering from local farmers and supplementing with produce from their regular distributors.

### **CONTACT PERSON**

Cheryl DeBerry 301-334-6968 cdeberry@garrettcounty.org

### ADDITIONAL INFORMATION

Serve It Up Local website:

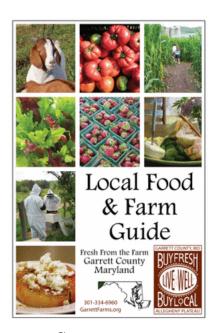
www.ServeItUpLocal.com

Garrett County Farms & Foods website: www.GarrettFarms.org

Serve It Up Local facebook page: www.facebook.com/Serveituplocal

Garrett Farms facebook page: www.facebook.com/garrettcofarms

Local Food & Farm Guide Online: simplebooklet.com/garrettfarms



Cover page



Photos from the culinary heritage event: www.serveituplocal.com/2013-photos.html



Local Farmer, Ben Yoder, talking to customers and chefs at the culinary heritage event

A local foods cooking activity with kids at the culinary heritage event



Local Chef Larry Roby prepares a soup made with specialty crop ingredients







**Cook Off Contest Sampling** 

Posters at the event



Afternoon event activities



#### FINAL REPORT

Project Title: Maryland's Best: Promoting Maryland's Specialty Crops

#### PROJECT SUMMARY

MDA's promotions connected Marylanders through radio, TV, print and online media by advertising nursery and greenhouse plants and flowers, strawberries, wine, the Buy Local Challenge, watermelons, peaches, apples, pumpkins, and Christmas trees as part of the strategy to promote specialty crops and stimulate the demand for local agricultural products.

This project has been previously funded and continues to increase demand and sales for Maryland grown specialty crops. A majority of the specialty crop promotions funded through this grant drive consumer traffic to the Maryland's Best web site which helps source specialty crops. We have seen a steady increase in visits to the web site and in sales of specialty crops, largely in part to the promotional efforts funded by this grant.

There are a few specialty crop organizations in the state and a majority of the organizations have volunteer boards with no staff to plan and implement much needed Maryland grown promotions. These promotions increase consumer demand for Maryland grown specialty crops in the MD and DC region, which is a very competitive market due to large amounts of produce sold there from outside the US and region.

### PROJECT APPROACH

All of the Maryland's Best specialty crop advertising paid for by this grant directs consumers back to the Maryland's Best web site. Once at the Maryland's Best web site, seasonal specialty crops are featured on the home page and consumers are directed to the search feature to find specialty crop producers near them.

<b>Target Promotion</b>	Target media	Web Visits	
Nursery and Garden	WYPR	4,004	
Centers			
(***) is made possible by the Maryland's Best, Buy Local Program, inviting listeners to enjoy the			
outdoors by using Maryland plants this spring and summer. To find a local nursery or garden			
center near you, marylands best dot net			
Strawberries	WYPR	5,014	
(***) is made possible by the Maryland's Best, Buy Local Program, inviting listeners to enjoy			
fresh, Maryland strawberries. Selecting berries includes looking for a full, bright-red color and			
firm, plump flesh. To find farm stands, pick your own, and farmers' markets featuring Maryland			
strawberries, Marylands best dot net.			
	Nursery and Garden Centers le possible by the Maryland's using Maryland plants this syou, marylands best dot net Strawberries le possible by the Maryland's and strawberries. Selecting by flesh. To find farm stands, p	Nursery and Garden Centers  le possible by the Maryland's Best, Buy Local Program, invusing Maryland plants this spring and summer. To find a legou, marylands best dot net Strawberries WYPR  le possible by the Maryland's Best, Buy Local Program, invand strawberries. Selecting berries includes looking for a fullesh. To find farm stands, pick your own, and farmers' markets	

June	Wine	WYPR, Southcomm,	5,509	
o arre	, , me	Washington Post		
July	Buy Local Challenge	WYPR, , Washington Post,	6,382	
July	Buy Local Chantenge	Southcomm, Event, Press	0,302	
		Release		
(***) is ma	de possible by the Maryland	Department of Agriculture's M	Jaryland's Rest Program	
		d produced foods during Mary	•	
		Available at farmer's markets, fa		
	grocery stores. For informati		arm stands and the local	
section of	grocery stores. For informati	on, maryiands best dot net		
August	Watermelons, Peaches,	WYPR, Washington Post,	4,341	
	, , , , , , , , , , , , , , , , , , , ,	Southcomm Event, Press	,-	
		Release		
(***) is ma	de possible by the Maryland	Department of Agriculture's M	arvland's Best Program.	
	•	aches. Selecting peaches include	•	
_	<i>5</i> • 1	oft to the touch. To find farm s	· .	
		aches, Marylands best dot net.	, , , , , , , , , , , , , , , , , , ,	
September Apples V		Washington Post, WYPR,	3,389	
		Southcomm, Press Release		
October	Apples	Washington Post, WYPR,	3,327	
		Southcomm, Press Release,		
		Fresh Summit Daily		
(***) is ma	de possible by the Maryland	Department of Agriculture's M	laryland's Best Program,	
		nd apples. Available at your lo	•	
		pick your own, and farmers' ma		
apples, Marylands best dot net				
December	Christmas Trees	Washington Post, WYPR,	3,023	
		Southcomm, Press Release,		
(***) is ma	ade possible by the Maryland	Department of Agriculture's N	Maryland's Best Program,	
		ristmas tree farm. This holiday		
trees wreat	hs garlands and more To fi	nd a farm near you, Maryland'	s best dot net	

# Advertising Impressions and Listeners

Month	Promotion	Estimated PrintAd	Estimated Radio Ad
		Impressions	Listeners
April	Nursery and Garden Centers	No print ads	400,000
May	Strawberries	378,076	400,000
June	Wine	588,346	400,000
July	Buy Local Challenge	1,032,353	400,000
August	Watermelons, Peaches	515,830	400,000
September	Apples	588,346	400,000
October	Pumpkins	588,346	400,000



December	Christmas Trees	588,346	600,000
		·	

Total Estimated Advertising Impressions: 3,901,567

Total Estimated Radio Advertisement Listeners: 2,800,000

### **Buyer-Grower Event**

In January, MDA hosted a Buyer-Grower Event at the Navy-Marine Memorial Stadium – N Room. This tradeshow style event is designed to connect Maryland specialty crop growers with buyers from grocery retailers, restaurants, schools, and other venues. In 2013, we had nearly 300 participants in the event and in the post-event evaluation; nearly all farmers that exhibited indicated they increased their sales as a result of contacts from the event.

### Chefs Go Fresh Event

In an effort to reach chefs in the DC metro area and increase their usage of specialty crops from Maryland, MDA sponsored the Chef's Go Fresh Event put on by the Georgetowner Media Group for the second time. The event consisted of a motorcycle tour for DC chefs to visit specialty crop producers in Maryland. Around 40 chefs participated in the event and were educated on the wide range of specialty crops that Maryland farmers offer. By being a sponsor, the Maryland's Best logo was used on all of the promotional materials for the event including cards, advertisements, and t-shirts. In addition several editorial articles were included in the Georgetowner that brought attention to specialty crops in Maryland. A directory of Maryland specialty crop producers was given to all of the participating chefs.

### Maryland's Best Soundbooks and DVD's

MDA continues to work with a professional photographer to expand on our "Sound Book." Sound Books bring the story of Maryland's farmers to the consumer; it's a photographic slideshow with narration from the farmer. Soundsbooks were created highlighting Maryland vegetable growers Miller Farms and Houser Produce. The images and sound are of high quality and it made an attractive promotional item.

### PMA Fresh Summit

From October 18-20, 2013 the Marketing Office of the Maryland Department of Agriculture exhibited at PMA Fresh Summit in New Orleans, LA. Fresh Summit is one of the largest fresh produce and floral expos and includes over 800 exhibitors and more than 21,000 attendees.

MDA's 2013 Fresh Summit strategy was to reach out to produce buyers and directors for grocery retailers that have a presence in Maryland and surrounding markets. The initial contact was made through an email and calling campaign, offering MDA's services and efforts in finding out how we could best serve their stores. A number of these contacts confirmed that they would be stopping by our booth and were very interested in learning more about produce from Maryland growers. In addition, an advertisement was placed in the Fresh Summit Daily which is the official newspaper for the expo and is printed and distributed each day during the three day trade show. The message was targeted towards



retailers in Maryland letting them know that consumers prefer and have the buying power to purchase Maryland grown specialty crops.

During the trade show, MDA had a 10ft x 10ft booth that featured a DVD on Maryland produce growers, Maryland specialty crop wholesale grower directories for buyers (hard copies & PDF on a thumb drive), new Maryland's Best promotional give-aways, informational handouts on Maryland "Local" laws, and market research on Maryland Consumers. In total, we had 70 attendees stop by the MDA booth including 16 key strategic contacts for networking opportunities; inquiries on Maryland produce growers, and information on MDA marketing campaigns. This included meetings with the following retailer buyers: Supervalu, Harris Teeter, Aldi, Ahold, Wakefern Food Corp, and Costco.

### **In-Store Apple Promotions**

During the month of November MDA held in-store promotions with Whole Foods Market, ShopRite, and Harris-Teeter. During this time we ran advertising for MD apples and designed and printed posters to hang in the stores. At the in-store promotions we sampled MD apples that were available on sale as well as handing out information on the apple industry in the state and educating consumers on what was available. The promotions were greatly appreciated by the consumers, grocery retailers, and farmers. At some of the promotions we quickly sold the store out of the variety of apple we were sampling.

# MPT's Maryland Farm and Harvest

To help increase the public's understanding of Maryland agriculture, Maryland Public Television (MPT) in partnership with the MDA produced Maryland Farm & Harvest, a new series that puts a human face on farming, educate viewers about agriculture, and tell the stories of the industry that built this nation and continues to feed the world. Specialty crop farmers are featured throughout the series.

# Maryland Cut Flower Brochure

The cut flower brochures have been printed and distributed throughout the state the libraries, farmers markets, and visitor centers.

### Grant Funds for Specialty Crops Only

Funds from this grant are used to enhance sales of specialty crops only. More than half of the vendors of the Buyer-Grower event were specialty crop producers. The non specialty crop producers were funded by general state funds.



### GOALS AND OUTCOMES ACHIEVED

Goal	Outcomes
Increase visits to Maryland's Best Web site	The goal was to have a 10% increase in visits in 2013 which would be 167,200. As of December 31, 2013 we have had 177,260 visitors which far exceeds our goal.
Increase access of specialty crop producers to diverse marketing channels	The goal was to increase the amount of buyers at the 2013 Buyer-Grower Expo to 90. At the 2013 Expo we had more than 100 buyers in attendance and exceeded our goal.
Maintain Maryland consumers' preference for local through promotions and advertising.	In 2012 the measurement of Marylanders preferring produce branded as grown in Maryland was 78% according to the University of Baltimore's Schaefer Center study. Our goal was to keep the measurement from declining by 5% and work to increase preference by 5%. In 2013 & 2014 MDA did not participate in the study due to budget constraints.
Increase sales of Maryland cut flowers	The cut flower brochures were printed and distributed. An informal poll was taken of MD cut flower growers and more than 90% of those contacted agreed they had at least seen a 2% increase in sales. Exact sales figures were unattainable.
Increase in demand and sales of Maryland apples	We were unable to confirm sales figures from the In-Store Apple Promotions, however we did sell out of apples at 3 stores that were part of the promotions. Both retailers and wholesale apple farmers confirmed a distinct increase in sales.

#### **BENEFICIARIES**

Maryland's Best specialty crop activities are designed to promote and assist all Maryland producers of the state's major specialty crops. Advertising specifically directs consumers to the Maryland's Best web site which contains nearly 800 specialty crop producers in the state. The 2013 Buyer-Grower Expo had 38 specialty crop growers exhibiting that connected with wholesale buyers throughout the region. These include growers of fruits and vegetables such as watermelons, various berries, apples, collards, kale, wine grapes, cucumbers, and squash, among many others.

#### LESSONS LEARNED

One important lesson learned is the immediate impact of in-store promotions and their potential after affects. While completing the in-store apple promotions we were able to sell out the stores of Maryland apples, in large part to the sampling and marketing materials developed through this grant. In addition, several of the retailers informed us that because of our promotions they had a significant increase in consumers specifically looking for Maryland grown apples.



Another important lesson was the difficulty in getting sales figures from companies and the need for a way to guarantee commitment. While many producers and retailers offered to share sales figures after promotions, actual access to those figures did not happen.

### **CONTACT**

Stone Slade Maryland Department of Agriculture Stone.slade@maryland.gov 410-841-5779

# ADDITIONAL INFORMATION









#### FINAL REPORT

Project Title: Reducing the Barriers Facing Maryland Fresh Fruits and Vegetables Producers in Implementing an Effective Food Safety Program (GAPS)

### PROJECT SUMMARY

The Maryland Department of Agriculture's (MDA) Food Quality Assurance Program (FQAP) has conducted Good Agricultural Practices (GAPs) and Good Handling Practices (GHPs) audits for fruit and vegetable producers and handlers through a cooperative agreement with USDA, AMS for several years.

FQAP has also assisted the University of Maryland with providing training sessions to producers concerning GAPs and GHPs. During the audits and training sessions, FQAP identified economic and technical barriers for specialty crop producers trying to implement GAPs and/or GHPs. FQAP was previously awarded specialty crop grant money to address these issues. The purpose of this project was to continue the successful work of previous grants in mitigating food safety risks by reducing the economic and technical barriers to implementing GAPs. This project was important to producers not only to meet the demands of buyers but to also start implementing practices to meet the FSMA final rule for produce. This project built on previously funded specialty crop grant projects "Good Handling Practices and Good Agricultural Practices (GHP/GAP) Certification Cost-Share Assistance" to provide cost share assistance for certification fees for producers obtaining USDA GAP certification; cost share assistance for implementing GAP practices; GAP training sessions; one to one assistance in writing food safety plans and implementing GAPs; and MDA GAP inspections and certification.

### PROJECT APPROACH

With previous grant funding, a dedicated position at the University of Maryland was filled in April 2011 to coordinate GAP training and provide one to one assistance to fruit and vegetable producers. In addition to the formal training sessions and one to one assistance, written materials were developed to assist producers in writing and implementing their GAP plans. These materials were made available to producers at training sessions, on MDA's website and mailed upon request. Feedback from producers and training evaluations were reviewed and used to make the training sessions more effective. The most significant change was to include actual plan writing for the producer's own farm as part of the course. To assist with plan writing both during and after the training sessions, relevant materials were presented on a flash drive. The training attendee was able to save their GAP plan started at the session on the flash drive and have all of the materials necessary to complete their plan at home. MDA also reviewed existing GAP materials and utilized the worker training materials (DVDs and signs) developed by the National GAP program at Cornell. Producers were provided with these so they could train their own employees. Funding from this grant allowed the continuation of training sessions for specialty crop producers; provision of training materials; revisions to the curriculum as the FSMA produce rule became final and more information is available on best practices; and one to one assistance to producers in developing food safety programs. Training evaluations were developed by the University of Maryland with the use of USDA-NIFA grant #68003-21588 funds. These evaluations were to determine the



effectiveness of the training sessions provided with the use of funds from this grant and to establish benchmarks for future training sessions. Evaluation results were also used to make adjustments to the training sessions.

During this grant period the GAPs educator at the University of Maryland hired in 2011 notified that she would be moving to California. An additional GAPs educator was hired to train with the original GAPs educator for three months during the growing season to ensure a smooth transition. The original GAPs educator left at the end of August and the new GAPs educator has assumed all of her duties.

The GAP program geared towards direct marketers and MD farm to school fruit and vegetable producers was developed, finalized and implemented cooperatively with the University of Maryland. The program now includes assistance to producers in meeting the produce final rule requirements. The MDA GAP program now includes fruit and vegetable producers that need USDA GAP, Harmonized GAP or one of the private GAP certification programs to meet their buyer needs. They are using the MDA GAP as a building block to move on to other GAP certifications. Training sessions offered to specialty crop producers have included a segment on the FDA proposed rule and will be updated for this year to include the required Produce Safety Alliance training curriculum based on the final rule and MDA GAP program requirements will continue to be adjusted so compliance with GAP will also mean compliance with the FDA rule. The audience has been identified as fruit and vegetable producers and notification of the program has taken place through press releases, emails, MDA's website and regional Extension offices. Inspections for MDA GAP now include not only compliance with GAP standards but also verification of compliance with the requirements of the FDA final produce rule. Twenty-nine specialty crop producers were inspected and certified as compliant with the MDA GAP program that included FDA proposed rule requirements with the use of funds from this grant. This is an 4% decrease over the number conducted during the 2014 growing season however four previously MDA GAP certified specialty crop producers successfully moved up to the USDA Harmonized GAP audit during this time period.

With the use of previous grant funding, criteria and an application process for cost share were developed for the implementation of GAP practices. The program was marketed to potential customers through emails to fruit and vegetable producers and presentations made during GAP training sessions for producers. Criteria established for projects required demonstration that the project would improve food safety. An application and list of examples that could be approved for cost share were developed and distributed to producers (Application and Cost Share List of Examples were provided with previous reports). Specialty crop producers were required to submit an application detailing what they hoped to achieve along with estimates of project cost. Awards were based on each applicant receiving a percentage of their project funded based on the amount of cost share funding available with a cap of \$4,000 per applicant. Applicants were notified of their award amount and were required to submit copies of invoices/receipts prior to cost share being issued. Fruit and vegetable producers received funding for projects that improved the water quality, worker health and hygiene, and packing house sanitation. Eleven specialty crop producers received cost share assistance from previously funded grants and one specialty crop producers received funding through this grant to implement good agricultural practices that improved water quality, improved sanitation of harvest and packing equipment, and improved pest control in packing sheds.



The target audience for all programs funded by this grant was notified through postings on MDA's website, direct emails to fruit and vegetable producers registered with MDA's Maryland's Best program, through the Extension offices, development and distribution of a University of Maryland Extension Bulletin and press releases.

The overall scope of this project did not benefit commodities other than specialty crops.

The University of Maryland including Cooperative Extension was a partner in this project and made significant contributions. In particular, they assisted FQAP in planning and presenting training, developing training materials, providing the one to one assistance in writing and implementing a GAP program and notifying specialty crop producers of the project. The University of Maryland also provided funding for the flash drives used for training sessions. The training evaluations were also developed by the University of Maryland with other grant funding.

#### GOALS AND OUTCOMES ACHIEVED

One of the goals was to increase the number of specialty crop farmers certified/approved by MDA as being in compliance with USDA GAP. Thirty-four different farmers have become USDA GAP certified during this project. The same farmers do not always become recertified each year depending on crop yield and sales so the number has not increased significantly each year. However, MDA verified all thirty-four of the farmers have implemented GAPs that meet the USDA audit standards. Twenty-nine specialty crop producers were inspected and certified as compliant with the MDA GAP program. This falls short of the revised goal of one hundred MDA GAP certified producers. Additional farmers have been implementing GAPs and have indicated they will soon request the MDA inspection to verify compliance. MDA expects this number to continue to increase during the next growing season. Through communications with these farmers at training sessions, during the one to one assistance, telephone calls and letters, MDA believes at least 100 farmers are in the process of implementing practices with the intention of requesting the MDA GAP audit.

Another goal of the project was to increase the number of specialty crop farmers that implement Good Agricultural Practices. During this grant period fifty producers have implemented better worker health and hygiene policies as a result of cost share of educational materials. One producer has implemented good agricultural practices related to water quality, harvest and packing equipment sanitation, and pest control using cost share reimbursement from this grant.

One of the project goals was to increase the number of specialty crop producers obtaining USDA or USDA Harmonized GAP certification by offering a cost share program for audits fees. Cost share for the cost of USDA GAP or USDA Harmonized GAP audits was provided to fourteen producers for their 2014 audit costs and to seven producers for their 2015 audit costs.

One hundred and fifty producers have attended training sessions provided during this grant period. The training sessions provide specific details on improving the on farm good agricultural practices for specialty crop production. It is assumed that most of the 150 farmers attending these sessions have



implemented at least some of the good agricultural practices. An additional seventy producers have received one to one assistance in writing a GAP program and successfully implementing the plan.

During this grant period a MDA GAP logo and MDA signs were developed. The logo can be used by MDA certified specialty crop producers to demonstrate their compliance with GAP to consumers and buyers. Signs were provided to all specialty crop producers holding a current MDA GAP certification.

Compliance with the FSMA final produce rule has been a long term goal of this project. The Program Manager attended several meetings with FDA Center for Food Safety and Applied Nutrition Produce Safety staff to learn about upcoming requirements for specialty crop producers. The University of Maryland staff attended the Produce Safety Alliance train the trainer course so FSMA training can be incorporated into future GAP training sessions. The Program Manager developed a FSMA questionnaire and distributed it to specialty crop producers to better understand what types of training and practices need to be implemented to assist producers as they comply with FSMA. (Questionnaire attached) Completed questionnaires are still being returned to MDA. Data from the completed questionnaires will be compiled and used to shape future activities for specialty crop producers.

During this grant period it was noted that many producers were not adequately cleaning packing and harvest equipment. The GAPs educator at UMD created specific guidance to assist specialty crop producers with implementing best practices for cleaning and sanitizing. This guidance is in the process of being approved as an Extension publication (Guidance under *Additional Information*). Interaction with producers also indicated understanding the water quality standards was an issue. The GAPs educator developed guidance to assist producers in understanding and implementing best practices for irrigation and pesticide application water quality. This publication has also been submitted for approval as an Extension publication (Guidance under *Additional Information*).

Three MDA employees earned continuing education credits to maintain their USDA GAP/GHP and Harmonized licenses. One of these auditors began training to become licensed to conduct USDA Mushroom GAP audits. One additional employee received initial training in preparation to meet the demands of increased inspections/audits as a result of the MDA and USDA GAP programs.

#### **BENEFICIARIES**

Over one hundred and fifty producers attended seven training sessions that were intended for Direct Marketers but attended by both direct marketers and wholesale marketers as they still covered the basics of GAP. Fifty specialty crop producers received cost share for worker health and hygiene educational materials used to implement effective employee training programs for good sanitation practices for production, harvest and packing workers. One specialty crop producer received cost share assistance to implement good agricultural practices that improved water quality, improved sanitation of harvest and packing equipment, and improved pest control in packing sheds. Twenty-one specialty crop producers received cost share reimbursement for USDA GAP audit fees. The beneficiaries have been able to maintain or increase their market share by meeting the food safety requirements of buyers and consumers. Additional specialty crop producers benefited from the water quality and cleaning and sanitizing equipment guidance documents developed during this grant period.



### LESSONS LEARNED

Interactions with farmers concerning GAP identified the actual writing of food safety plans to implement GAPs is the biggest barrier. The revised training that includes hands on plan writing has been continued. This has been a very effective method of assisting farmers to write their plans and has increased the number of producers implementing a GAP program. FQAP has obtained other Specialty Crop grants to assist farmers in writing and implementing GAPs to continue the work of this project. The goal of steadily increasing the number of farmers that are GAP certified was difficult to meet. Although producers implemented and requested USDA audits initially, many did not request in subsequent years as their crop may have suffered significant pest damage, was being sold for processing instead of for the fresh market, etc. A survey has been developed to send producers who attend GAP training sessions but do not follow up to become certified to better understand potential barriers and measure the effectiveness of the training sessions. The survey includes questions to determine why a larger percentage are not following through with certification and what GAP practices they implemented even though they did not become certified. A limited number of the surveys were returned to MDA.

Initially, FQAP anticipated that once a producer became USDA GAP certified they would maintain that certification each year. The primary reason farmers gave FQAP was there was no sense in spending the time and money for an audit if their buyer was not requiring it or they had little crop to sell (frost or insect damage was cited as the reason for reduced crops to sell). MDA has found that most of these producers continue to follow their GAP program even though they may not request an audit every year.

During the first year the MDA GAP certification program was offered, only three producers requested the inspection and certification. The following year, nineteen specialty crop producers requested the inspection and certification. In the 2014 crop year, thirty specialty crop producers requested inspection and certification. During the 2015 crop year, twenty-nine specialty crop producers requested inspection and certification. Feedback from the producers new to the program this year indicated the posting of others on MDA's website as having passed the inspection was encouragement to them that they could successfully pass the inspection and obtain certification.

#### CONTACT PERSON

Deanna Baldwin

Telephone: 410-841-5769

Email: Deanna.Baldwin@maryland.gov

#### ADDITIONAL INFORMATION









# **Good Handling Practices (GHPs):**

# Cleaning and Sanitation of Equipment and Packing Lines

Donna Pahl, University of Maryland

#### Introduction

Good Handling Practices, or GHPs, refer to the practices that occur during or after produce harvest. These practices vary by farm and commodity, and may include harvesting (manually or mechanically), packing (in a field or going through a packing line), refrigeration, and transportation. These particular practices occur directly before the produce is sold to the consumer, and are therefore very important.

This fact sheet focuses on one large aspect of GHPs: cleaning and sanitation of equipment, packing lines, and harvest containers. Produce coming from the fields may have low, but measureable, levels of pathogens. Our goal with having a cleaning and sanitation program is to minimize the transfer of pathogens between batches of produce. By improving the cleaning and sanitation practices on equipment and produce contact surfaces, we can limit the introduction of pathogens from the packing area and minimize chances of cross-contamination.

#### Why is cleaning and sanitation of equipment and packing lines important?

Dirt and contamination on equipment, packing lines, and produce contact surfaces can introduce both human and plant pathogens (such as molds) to harvested produce. This type of contamination not only reduces the quality of the produce, but it shortens its shelf-life and storage ability as well. Bacteria on equipment can also form a build-up of biofilms – a hard plaque of bacteria that is very difficult to remove and can lead to microorganisms breaking off and re-contaminating produce.

#### What is sanitary design?

Sanitary design simply means that equipment and packing lines can be properly cleaned and inspected between uses. Packing areas are set up so that any equipment, tables, and other surfaces:

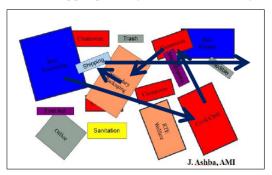
- 1) Can be accessed for inspection. Allow for room between equipment and walls, so that all parts of the packing line can be monitored for buildup of dirt and debris. Shields can be removed for further inspection.
- 2) Are constructed from materials that can be properly cleaned and sanitized. Attributes of sanitary construction include:
  - a) having hard surfaces that are impervious and nonabsorbent,
  - b) easily cleanable,
  - c) smooth surfaces,

- d) resistant to wear and corrosion,
- e) can withstand action of cleaning and compounds,
- f) light colored (so that dirt and buildup can be easily spotted).

Materials such as wood, sponges, and foam are almost impossible to clean and sanitize, when compared to metal and stainless steel. If possible, cover wood and foam bumpers on packing equipment with vinyl or another material that can be cleaned. Wooden tables can also be covered with plastic or vinyl (even tablecloths), to increase ability to clean and sanitize.

- 3) Are **operated and maintained** in a way that minimizes contamination. This includes training workers on cleaning practices, performing those cleaning and sanitation practices regularly (on a scheduled basis), and performing regular inspections.
- 4) Have a linear flow through the packing area. Try to minimize the cross-over between incoming produce from the field, and packed produce ready to be shipped out. Additionally, keep culls and trash in separate areas. This linear flow keeps everything organized and prevents cross-contamination.

Diagram: Examples of an unorganized flow through the packing area from receiving to shipping (on left), versus a linear flow through the packing area (on right):



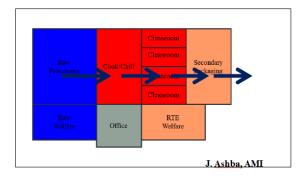


Figure source: J. Ashba, American Meat Institute.

#### What needs to be cleaned and sanitized?

There are several "control zones" within a packing area, which are dependent on how close the produce is to each zone. Spend more time focusing your cleaning and sanitation on the direct contact surfaces (Zone 1), however all areas of the packing area will need to be addressed.

**Zone 1:** The area in the packing house with direct **produce contact surfaces** (any area that touches the produce) after a microbial reduction step (such as a dump tank) and before packaging. If there is no kill step, Zone 1 is where the produce is exposed to the packing equipment until it is packed.

Examples of Zone 1: Conveyor belts, brushes, bumpers, tables, tubing, utensils (knives, cutting boards), ice makers and ice storage bins, gloves, aprons.



Zone 2: Non-product contact areas that are adjacent to contact surfaces.

Examples of Zone 2: Lubricants, equipment framework supports, drip shields over the produce, lights, water nozzles, equipment buttons, phones (workers will be checking their phones before touching produce), cleaning tools (brooms, mops, buckets, sponges).

Zone 3: Non-product contact areas within the packing/processing area that are removed from produce contact surfaces BUT could result in cross-contamination.
Examples of Zone 3: Floors, hoses, condensate, forklifts, trash cans, walls and ceilings, pallets, drains



Zone 4: Farthest from the production area. This zone includes all non-product contact surfaces outside of the packing area. Examples of Zone 4: Cooler/freezer floors, bathrooms, breakrooms, loading docks.

Figure: Examples of control zones in a packinghouse.

Photo source:

http://www.gvcustomsoftware.com.au /Images/CaseStudies/Turiwiri%20Packing% 20Line.jpg

### What are the steps involved in cleaning and sanitizing a packing area?

- Remove dirt and debris. Detergents and sanitizers will not be able to properly clean and kill microorganisms in a dirty environment. This may be done with a broom or rake to remove bulk debris, depending on how dirty the equipment is. A water rinse can then be used to soften and remove dirt.
- 2. Use a surfactant solution, like soap and water, to remove the rest of the dirt. There are many types of cleaners that can be used (surfactants, alkaline cleaners, acid cleaners, enzymatic cleaners) depending on the surface and type of soil you are dealing with (oils or animal fats, for example). Surfactants, the category that includes soaps and detergents, are suitable for most surfaces and soils and are easy to obtain. Surfactants work by lowering the surface tension of water which allows for increased penetration into the soil and for soil to be suspended in solution. Surfactants can also be successful in removing bacterial biofilms from equipment.

- 3. **Use a water rinse to remove surfactants and soil.** This rinse step will remove any soil and surfactants left on the equipment. Residual surfactants (soaps and/or detergents not rinsed off) would counteract the efficacy of the sanitizer about to be used.
- 4. Apply a sanitizer to disinfect your equipment and packing area. Sanitizers are relied on to kill disease-causing bacteria, viruses, and parasites on food-contact surfaces. Certain sanitizers are also effective in removing bacterial biofilms from equipment.

### What sanitizer should I use for sanitizing my packing line and equipment?

Type of Sanitizer	Recommended Concentration	Advantages	Disadvantages	Examples
Chlorine	50 – 200 ppm	- Relatively inexpensive - Easy to obtain - Effective on wide range of bacteria	- Dependent on pH - Breaks down with organic matter - Light degradation -Limited use on organic processes - Corrosive -Off-gassing at high temperatures	- Chlorine bleach (Sodium hypochlorite) - Calcium hypochlorite
Peroxyacetic Acid (Peracetic acid, PAA)	50 – 350 ppm (Check manufacturer's label)	- Removes biofilms - Stable at range of pH levels - Not broken down by organic matter - Effective on wide range of bacteria	- More expensive - Corrosive - Can be volatile at high temperatures	- Tsunami (Ecolab) - Sanidate (Biosafe Systems)

#### What records must be kept for your cleaning and sanitation practices?

- 1. Material Safety Data Sheets (MSDS) and labels for any cleaners and sanitizers.
- 2. Logs of application time, date, and concentrations.
- 3. Standard Operating Procedures (SOPs). These should include enough information for any worker to perform the cleaning and sanitizing tasks. These SOPs can be very useful when training new workers how to perform these important cleaning and sanitation practices.

Key concepts to include in the SOPs include:

- Concentration of cleaners and sanitizers used.
- How is the required concentration of sanitizer measured?
- How is the concentration of sanitizer adjusted?
- How often are the levels of sanitizer monitored?



- Does water pH or temperature need to be monitored? If so, how often?
- What are corrective actions if the levels are insufficient?
- What is the required contact time for each cleaner and sanitizer?

#### Processing / Packing Line Log

#### Name of operation:

Please see the food safety plan for overall processing/packing line water control procedures.

Date	Cleaning List (check each)					Date	Treatment	Cleaned By (name)
	Contact Surface	Dump Tanks	Flumes	Wash Tanks	Hydro Cooler	Cleaned		By (name)

Figure: Sample log for documenting cleaning and sanitation practices.

Log source: www.gaps.cornell.edu

#### How can cleaning and sanitation practices be verified?

Cleaning and sanitation practices can be verified through several means.

- 1. **Review documentation** to ensure that cleaning schedule is being adhered to, and that your packing area and equipment are being cleaned and sanitized regularly.
- Visually inspect all surfaces regularly especially those difficult to clean areas. These
  areas can be under safety shields, near packinghouse walls, or just difficult to reach.
  These are the areas that are most often neglected.
- 3. Swab Zone 1 areas (produce contact surfaces) for dirt and debris using wet sponges. If sponges become dirty while swabbing, then cleaning practices are insufficient. Additionally, sponge and swab samples can be taken and tested for pathogens. If pathogens are present, then cleaning and sanitizing measures must be improved.

#### Do food-grade lubricants need to be used?

Food-grade lubricants need to be used for any contact surfaces (Zone 1) – even if contact is unlikely. These surfaces include chain lubricants, gearbox fluids, hydraulic and compressor fluids, and general purpose lubricants. Non-food grade lubricants are acceptable for surfaces that do not contact food.

#### **Cleaning and Sanitation of Harvest Containers**

The above practices listed in "Cleaning and Sanitizing a Packing Area" can be used for cleaning and sanitizing harvest containers. Since these picking containers are often reused and left out in the field, it is recommended that cleaning and sanitization occurs on a scheduled basis.

We recommend the following steps when washing plastic harvest containers (see above "Cleaning and Sanitizing a Packing Area" for more detail):

- Remove dirt and debris. As mentioned above, detergents and sanitizers will not be able
  to properly clean and kill microorganisms in a dirty environment. Any caked-on dirt can
  be scraped or brushed off.
- 2. Use a surfactant solution, like soap and water, to remove the rest of the dirt. If dirt is caked-on, let the container sit in solution for a few minutes. Dirt will loosen and be able to be scrubbed off. This step can be done in a large sink, wheelbarrow, or plastic container. If soapy solution is sprayed on containers (and not allowed much contact time), more scrubbing may be needed.
- 3. **Use a water rinse to remove surfactants and soil.** This rinse step will remove any soil and surfactants left on the containers. Residual surfactants (soaps and/or detergents not rinsed off) would counteract the efficacy of the sanitizer about to be used.
- 4. **Apply a sanitizer to disinfect your harvest containers.** Sanitizers are relied on to kill disease-causing bacteria, viruses, and parasites on food-contact surfaces. The easiest manner of disinfecting containers is to dip into a wheelbarrow, sink, or tub full of sanitizing solution. The same sanitizers can be used as mentioned above in the "What sanitizers can I use for sanitizing my packing line and equipment?" section.
- 5. Allow containers to dry before being used. Wet containers have a greater chance of enabling the cross-contamination of microorganisms, both human pathogens and plant pathogens.
- 6. Fill out and sign off on harvest container cleaning log.

#### **Additional Resources:**

- "Calculating, measuring, and adding chlorine to water." University of Maryland. https://www.youtube.com/watch?v=CAfKOREDQNI
- "Cleaning and sanitizing basics." Pennsylvania State University.
   http://extension.psu.edu/food/dairy/cleaning-sanitizing-resources/cleaning-and-sanitizing-basics
- "Choosing and Using a Chlorine-based disinfectant during postharvest handling of fruits and vegetables." North Carolina State University Extension Program. <a href="https://www.uvm.edu/~susagctr/whatwedo/producesafety/GAPsResources/gapresChlorineProductChoosing.pdf">https://www.uvm.edu/~susagctr/whatwedo/producesafety/GAPsResources/gapresChlorineProductChoosing.pdf</a>

#### **Sources:**

- "Facilities and Equipment Cleaning and Sanitation". Improving the Safety and Quality of Fresh Fruits and Vegetables: A Training Manual for Trainers. Joint Institute for Food Safety and Applied Nutrition.
- 2. "Types of Cleaners". Penn State Food Science Food Safety and Sanitation.









# Good Agricultural Practices (GAPs): Irrigation Water Mitigation

What should you do if you have received your water test, and the results show that levels of *E. coli* exceed the maximum amount allowed?

- Before investing in a system to clean and sanitize your irrigation water, first do a visual survey of your water sources to investigate what is causing the elevated microbial counts. While performing a survey of your water sources, ask yourself:
  - O Is there any obvious animal contamination or runoff into your water source?
    - Evidence of animal intrusion into the water source (livestock, domestic, or wild animals)?
       Is it possible to fence these animals out or prevent birds from landing?
    - O Are animal pastures, buildings, or manure storage located uphill from water sources? Is it possible to build a berm to divert runoff away from the water source?
  - Has it been unusually rainy? High amounts of precipitation can stir up sediment and run off into water sources, increasing bacterial counts.
  - Are backflow prevention devices installed and properly functioning?
  - O Well:
    - O Inspect the well casing: is it cracked or corroded? Are there any areas that allow leaking and contamination into the well? If so, can the cracked areas be patched?
    - O Is the well cap broken or missing?
    - O Do any seals appear to be broken or missing?
  - Surface water: Is the irrigation intake valve floating above the sediment? If the intake is pulling
    up sediment, that may lead to higher bacterial counts.
- 2. If possible, consider switching to an alternative water source (for irrigation and/or pesticide application) while bacterial counts remain high. If there is not an alternative water source, is it possible to switch to a less-risky irrigation method? For example, using trickle irrigation instead of overhead irrigation.
- After making any changes, give the water source a few weeks to settle out then take another water test
- If you survey the water sources and cannot identify a potential source of contamination, and a
  resulting test does not show a decrease in levels of *E. coli* bacteria, then mitigation measures might
  be necessary.

#### **Disinfection Options for Agricultural Water Sources**

 Shocking the well with chlorine. Often used for new wells, shock chlorination is a one-time treatment designed to kill bacteria in the well. It is cheap and often effective. This is the only disinfection option that treats the water source. When shocking the well, a 200 ppm chlorine solution (often using household bleach, or sodium hypochlorite) is allowed to sit in the well and plumbing system for several hours to overnight. Afterwards, the water is pumped until there is no chlorine smell (and chlorine test strips register at low levels). Colorado State University has published a very detailed guide to shocking wells "Bacteria in Water Wells", which can be found here: <a href="http://www.ext.colostate.edu/pubs/natres/06703.html">http://www.ext.colostate.edu/pubs/natres/06703.html</a>.

- 2. Installing an Ultraviolet (UV) filter. Often used in dairies, a UV filter can effectively and quickly kill microorganisms in water. UV filters can by fairly expensive upfront and do require electricity, however the operating costs and upkeep are minimal. UV filters may be better served with wells or low-flow systems (such as trickle irrigation, as opposed to overhead irrigation) due to the relatively slow water output.
- 3. Antimicrobial chemicals.
  - a. Chemical injector system. For relatively low-flow irrigation systems (such as trickle irrigation and postharvest water), a chemical injector or chemilizer can be used to inject small amounts of sanitizer into the irrigation system. Chlorine bleach or peroxyacetic acid (PAA) can be used very effectively. As small concentrations of sanitizer are mixed into the irrigation water, microorganisms are killed off and the sanitizer is degraded. This system will also prevent iron-forming bacteria from clogging up drip emitters. Setting up this system will require you to test the levels of chlorine at the beginning of the system and at the emitters. Chlorine concentrations of 4ppm or less in the released water are desired.
    - More information on treating drip irrigation systems with sanitizers can be found here <a href="http://www.netafimusa.com/files/literature/greenhouse/Maint\_Treatment-with-Chlorine.pdf">http://www.netafimusa.com/files/literature/greenhouse/Maint\_Treatment-with-Chlorine.pdf</a> and here:
    - https://prod.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_068454.pdf.
  - b. Accu-tab chlorination system. This system uses calcium hypochlorite tablets to sanitize water. It is suitable for high-output water needs, such as overhead irrigation. As water is pulled in through the intake, a small amount is diverted through venture pressure and run through the chlorine tablets. The chlorinated water then mixes with the rest of the water as it runs through the system, diluting the sanitizer to low levels. More information can be found here: <a href="http://accu-tab.com/Applications/Food-Safety-Irrigation/Irrigation">http://accu-tab.com/Applications/Food-Safety-Irrigation/Irrigation</a>.

#### Additional sources:

- 1. "What do you do if your water results come back too high?". University of Maryland. <a href="https://www.youtube.com/watch?v=e-ezhCpT6JQ&feature=youtu.be">https://www.youtube.com/watch?v=e-ezhCpT6JQ&feature=youtu.be</a>.
- 2. "Bacteria in water wells." Colorado State University. <a href="http://www.ext.colostate.edu/pubs/natres/06703.html">http://www.ext.colostate.edu/pubs/natres/06703.html</a>.
- 3. "Recommendations for the treatment of drip irrigation systems with chlorine." Netafim USA. <a href="http://www.ext.colostate.edu/pubs/natres/06703.html">http://www.ext.colostate.edu/pubs/natres/06703.html</a>.
- "Manual for chlorine treatment of drip irrigation systems". Natural Resource Conservation Service, United States Department of Agriculture. https://prod.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_068454.pdf.
- 5. Accutab Irrigation System: <a href="http://accu-tab.com/Applications/Food-Safety-Irrigation/Irrigation">http://accu-tab.com/Applications/Food-Safety-Irrigation/Irrigation</a>



#### MDA Food Safety Modernization Act Produce Rule Questionnaire

MDA will use this information to plan assistance to growers with the implementation of the FSMA produce rule and use of USDA Specialty Crop funding. Do not put your name or other identifying information on this form and please do not complete the questionnaire more than once as it will skew the data we are collecting on the impact of FSMA Produce rule implementation. Return to MDA, FQAP, 50 Harry S. Truman Parkway, Annapolis, MD 21401

1.	County(s) Farm located in:	
2.	Acres of Produce:	
3.	Primary fruits and vegetables produced:	
4. □USD	Oo you have GAP/GHP certification? □Yes □ No If yes, what type? □MDA GAP A Harmonized GAP □Other type, please specify	
5.	Annual Gross Sales of Produce:  □ ≤\$25,000 □ \$25,000 to \$500,000 □ >\$500,000	
kale, ki rhubarl	Type of produce (Please check all that apply):  Produce that is rarely consumed raw (arrowhead, arrowroot, artichokes, asparagus k choy, Brussels sprouts, chick-peas, collard green, crabapples, cranberries, eggplant hey beans, lentils, lima beans, okra, parsnips, peanuts, pinto beans, plantains, potator rutagaba, sugarbeet, sweet corn, sweet potatoes, taro, turnips, water chestnuts, winted Produce that receives commercial processing that reduces the presence of microorganificance  Produce that is consumed raw	r, figs, ginger root, es, pumpkin, er squash and yams)
	Please check how you sell your produce:  Over 50% of your produce is sold directly to a consumer, restaurant and/or retail for within MD or if out of state not more than 275 miles from your farm  Less than 50% of your produce is sold directly to a consumer, restaurant and/or retainment located within MD or if out of state not more than 275 miles from your farm	
8.	Water Quality/use  Irrigation Potable Well Non potable Well Irrigation Ponds Water treated If so, what type of treatment Other surface waters Water treated If so, what type of treatment Trickle Overhead	
	<ul> <li>Pesticide Application</li> <li>□ Potable Well</li> <li>□ Non potable Well</li> <li>□ Irrigation Ponds</li> <li>□ Other surface w</li> </ul>	raters
	Post Harvest (dump tanks, flumes, washing, etc.)  □ Potable Well □ Non potable Well □ Irrigation Ponds □ Other surface washing.  In Sanitizer/treatment used in water □ Yes □ No If so, what type and how do yet.	



# MDA Food Safety Modernization Act Produce Rule Questionnaire

MDA will use this information to plan assistance to growers with the implementation of the FSMA produce rule and use of USDA Specialty Crop funding. Do not put your name or other identifying information on this form and please do not complete the questionnaire more than once as it will skew the data we are collecting on the impact of FSMA Produce rule implementation. Return to MDA, FOAP, 50 Harry S, Truman Parkway, Annapolis, MD 21401

	ete the questionnaire more than once as it will skew the data we are collecting on the impact of FSMA Produce rule nentation. Return to MDA, FQAP, 50 Harry S. Truman Parkway, Annapolis, MD 21401  Livestock/Poultry on Farm  Cattle/Bison Swine Sheep Goats Poultry Other
10.	Manure/Compost Use ☐ No raw manure used on farm ☐ Composted manure only used ☐ Raw/untreated manure used for grain crops only ☐ Raw/untreated manure used for produce If so, interval between application and harvest
11.	Harvest ☐ Mechanical harvest of produce If so, what crops ☐ No mechanical harvest
12.	Post Harvest  Field pack only  Packing Shed enclosed Tes No No N/A  Dry packing line Dump tank Flume Washed Other
13.	Is your farm in close proximity to surface waters (rivers, streams, creeks, etc.) □Yes □No
14. farmin	How important are food safety issues and compliance with the upcoming FSMA produce rule to your ag operation?  □ Extremely important □ Somewhat important □ Not important
GHP I	What type of assistance would be of value to you in implementing a GAP/GHP program and/or iance with the FSMA Produce Rule?  Detailed guidance documents on GAP/GHP practices that comply with FSMA Produce Rule  One to one assistance in writing and implementing a food safety program  MDA GAP inspections to verify effectiveness and compliance of GAP/GHP practices  Training sessions If so, please list specific types of training (ex. General GAP principles, General orinciples, writing food safety plans, Cleaning and disinfecting equipment/harvest containers, FSMA ements, etc.)
•	
	☐ Cost share for implementation of GAP/GHP practices ☐ Cost share for USDA GAP/GHP USDA Harmonized Audit fees ☐ Research to assist with science based requirements for FSMA produce rule and GAP/GHP practices ☐ Other



# MDA Food Safety Modernization Act Produce Rule Questionnaire

MDA will use this information to plan assistance to growers with the implementation of the FSMA produce rule and use of USDA Specialty Crop funding. Do not put your name or other identifying information on this form and please do not complete the questionnaire more than once as it will skew the data we are collecting on the impact of FSMA Produce rule implementation. Return to MDA, FOAP, 50 Harry S, Truman Parkway, Annapolis, MD 21401

	te the questionnaire more than once as it will skew the data we are collecting on the impact of FSMA Produce rule nentation. Return to MDA, FQAP, 50 Harry S. Truman Parkway, Annapolis, MD 21401  Livestock/Poultry on Farm  Cattle/Bison Swine Sheep Goats Poultry Other
10.	Manure/Compost Use  ☐ No raw manure used on farm ☐ Composted manure only used ☐ Raw/untreated manure used for grain crops only ☐ Raw/untreated manure used for produce If so, interval between application and harvest
11.	Harvest  ☐ Mechanical harvest of produce If so, what crops ☐ No mechanical harvest
12.	Post Harvest ☐ Field pack only ☐ Packing Shed enclosed ☐ Yes ☐ No ☐ N/A ☐ Dry packing line ☐ Dump tank ☐ Flume ☐ Washed ☐ Other
13.	Is your farm in close proximity to surface waters (rivers, streams, creeks, etc.) □Yes □No
14. farmin	How important are food safety issues and compliance with the upcoming FSMA produce rule to your g operation?  □ Extremely important □ Somewhat important □ Not important
GHP p	What type of assistance would be of value to you in implementing a GAP/GHP program and/or innce with the FSMA Produce Rule?  Detailed guidance documents on GAP/GHP practices that comply with FSMA Produce Rule  One to one assistance in writing and implementing a food safety program  MDA GAP inspections to verify effectiveness and compliance of GAP/GHP practices  Training sessions If so, please list specific types of training (ex. General GAP principles, General principles, writing food safety plans, Cleaning and disinfecting equipment/harvest containers, FSMA ements, etc.)
	□ Cost share for implementation of GAP/GHP practices □ Cost share for USDA GAP/GHP USDA Harmonized Audit fees □ Research to assist with science based requirements for FSMA produce rule and GAP/GHP practices □ Other



MDA GAP Logo and Sign







#### FINAL REPORT

Project Title: Maryland's Best Press & Promotion Tours

#### **PROJECT SUMMARY**

The Drink Local Wine Conference is an organization that focuses on exploring and highlighting American wine. Each year, the organization picks a new region to highlight. In the past, they have showcased Texas, Virginia, and Colorado wines. They picked Maryland for the 2013 conference. The goal of the conference was to garner more publicity for the Maryland wine industry, and to show influential wine bloggers and writers firsthand the progress that Maryland wine has made. By taking influential wine bloggers and writers directly to the wine and vineyards, we were able to acclimate them with Maryland wine and educate them about the grapes that grow in Maryland.

The conference was scheduled to be in the spring of 2013. We chose the second weekend of April, as it's a slow time in the winegrape industry. We also wanted there to be fresh produce (greens, onions, etc.). We also wanted there to be fresh produce available in Maryland during the conference.

Positive media attention from outside the local media market is often the kindling to bring greater credibility/reputation to a local wine region. We felt that 2013 was an appropriate time for the conference because Maryland winegrapes have finally achieved a level of quality worthy of national attention.

#### PROJECT APPROACH

#### **Pre-Conference**

The Drink Local Wine Conference group approached us about partnering with them for the 2013 conference. They contributed the concept and helped plan the conference. They also provided the lists of bloggers and writers for us to invite. The group also designed their own Web page to promote the conference and contributed to advertising with their own contacts and media outlets. Their partnership also helped to brand the conference and garner media attention.

Our partnership with MDA was imperative to our success in this conference. They provided branding support, ran a social media campaign that garnered publicity and public attraction, and were helpful in answering questions regarding the planning process.

The majority of the grant period was spent planning for the conference. This involved scouting locations for events and hotels for the conference, as well as interviewing catering companies and restaurants to ensure locally-sourced meals during the meetings and media tour. Once the majority of the conference was planned, we began the process of inviting VIPS. We also promoted the conference through a variety of local media outlets.



Project Activity	Who	Start	Completion
Develop formal schedule of regional tours and weekend summit	Briana Berg	Nov 2012	Dec 2012
Announce weekend summit	Briana Berg	Dec 2012	Dec 2012
Develop list of targeted media to invite	Briana Berg	Dec 2012	Dec 2012
Develop seminar and tour themes	Briana Berg	Jan 2013	Jan 2013
Develop weekend full summit schedule and itinerary	Briana Berg	Jan 2013	Jan 2013
Recruit co-sponsors to value-add promotions	Briana Berg	Jan 2013	Jan 2013
Invite select specialty crop producers to participate or be featured in panel discussions, tours and tastings	Briana Berg	Feb 2013	Feb 2013
Reserve transportation, catering and destinations for weekend summit	Briana Berg	Feb 2013	Feb 2013
Invite media and VIPS	Briana Berg	Feb 2013	March 2013
Promote Conference	Briana Berg	February 2013	April 2013
Host weekend summit	Briana Berg	April 2013	April 2013
Survey participating media after program about impressions of Maryland specialty crops	Briana Berg	May 2013	June 2013
Evaluate Twitter impressions and media results	Briana Berg	June 2013	June 2013

#### Conference

On April 12, 2013 MWA took 50 VIP media and press on a wine tour. We took them to Sugarloaf Mountain Vineyard, Black Ankle Vineyards for lunch catered by Woodberry Kitchen, and Boordy Vineyards. Different wineries in the area joined us on the tour including: Elk Run Vineyards, Fiore Winery, and Cygnus Wine Cellars. We concluded the day with presentations at Waterfront Kitchen where five Maryland wines were served with locally-sourced meal. The next day, 150 members of the media and industry met at the Tremont Suites Hotel in Baltimore for the main conference. Three panel-guided sessions took place in the morning discussing various topics, including the history of Maryland winegrowing, "new" grape varieties to Maryland, new trends and emerging wine regions in Maryland, which grapes grow well and where, and what styles of wine are prospering. We had a lunch at the hotel with three Maryland wines poured. The day concluded with the Twitter Taste-Off, a culmination of the day's presentations and an opportunity for the conference members to taste what had been discussed throughout the conference. The event featured 20 Maryland wineries pouring two wines each—all Maryland appellation, meaning made from Maryland grapes—for the public, the press, and the conference members. Below is the agenda for the media and press wine tour and for the Saturday conference.



# DRINK LOCAL WINE CONFERENCE MEDIA ACCESS SCHEDULE

10:00 a.m. – Buses depart from the Tremont Suites Hotel in Baltimore for the winery tours. Prior to the bus leaving, please check in to the hotel. If your room is not ready, the front desk will be able to hold your bag until we return. Buses sponsored by Nomacore.

11:15 a.m. – Arrive at Sugarloaf Mountain Vineyard in Dickerson, Maryland. Elk Run Vineyards will also join Sugarloaf in showcasing their wines.

12:15 p.m. – Depart from Sugarloaf Mountain Vineyard

1:00 p.m. – Arrive at Black Ankle Vineyards in Mt. Airy, Maryland. Lunch catered by Woodberry Kitchen will be served at this stop. Lunch sponsored by the Maryland Office of Tourism.

3:00 p.m. - Depart from Black Ankle Vineyards.

4:30 p.m. – Arrive at Boordy Vineyards in Hydes, Maryland. Cygnus Wine Cellars and Fiore Winery will join Boordy in showcasing their wines.

5:30 p.m. – Depart from Boordy Vineyards.

6:30 p.m. – End the tour for dinner at Waterfront Kitchen in Fells Point. Dinner is sponsored by the Maryland Department of Agriculture and the Maryland Wineries Association.

8:30 p.m. – Free time in the historic Fells Point neighborhood. Cabs back to the hotel sponsored by Uber.

9:30-11 p.m. – Optional Hospitality Suite at the Tremont Suites Hotel. Room number TBA. Hospitality suite sponsored by Nomacorc.

#### WELCOME TO MARYLAND WINE

From the mountains of Western Maryland to the Chesapeake plains of the Eastern Shore, and from the Piedmont region to Southern Maryland, we are proud to present the Maryland wine industry via Drink Local Wine Conference 2013. ASK FOR

Maryland

drinklocalwine

The Maryland Wineries Association, Inc. is a nonprofit 501(c)6 trade organization representing Maryland's commercial wineries.

Founded in 1984, the MWA's mission is to develop and expand the grape and wine industry in Maryland—through education, promotion and government affairs.

We are proud to say that every licensed winery, meadery and cidery in the state is a voluntary member of our association. Learn more about the Maryland Wineries Association, our wineries, trails history and more: www.MarylandWine.com

#### DRINK LOCAL WINE

Welcome to Drink Local Wine, the organization dedicated to telling the story of American wine, which is now produced in all 50 U.S. states.

Drink Local Wine was founded in 2008 by Jeff Siegel, "The Wine Curmudgeon," and Washington Post wine columnist Dave McIntyre. We started by sponsoring Regional Wine Week, encouraging bloggers and wine columnists to write something about their local wines

and posting links to the stories on www.drinklocalwine.com.

The website grew into an organization, now incorporated as a 501(c) non-profit, complete with a Board of Directors of wine

enthusiasts across the country dedicated to telling the story of local wine. The organization sponsors an annual conference to introduce bloggers around the country to an exciting wine region they may have never before explored. Starting in 2009, these conferences were held in Texas, Virginia, Missouri, Colorado and Maryland.

#### SCHEDULE OF EVENTS

8:00 a.m. Conference Registration (Tremont Hotel)

Join us in the Roman Strada room to check in. Light refreshments and a continental breakfast will be served. The

breakfast is sponsored by Wicomico County.

Session I: Creating Maryland's Wine Identity (Tremont Hotel) 9 - 9:45 a.m. The history of Maryland wine from the 1940s to the present,

which grapes grow well here and where, and what styles of wine

are prospering.

Moderator: Richard Leahy, author, Beyond Jefferson's Vines. Panelists: Marguerite Thomas, author, Touring East Coast Wine Country; Robert Deford, owner, Boordy Vineyards; Dr. Joe Fiola, Cooperative Extension, College of Agriculture & Natural

Resources, University of Maryland.

Session II: Drinking Local (Tremont Hotel) 10 - 10:45 a.m.

Does locavore mean locapour? Do Marylanders appreciate their home-grown wine, and if not, how to get the message out.

Moderator: Dave McIntyre, Washington Post wine columnist,

Drink Local Wine co-founder.

Panelists: Jerry Pellegrino, chef, Waterfront Kitchen; Jade Ostner, Director of Events, Maryland Wineries Association; Al Spoler, co-host, Cellar Notes/Radio Kitchen, WYPR Radio.

11 - 11:45 am Session III: Maryland's New Guard (Tremont Hotel)

Who is setting the quality standard for Maryland wine today? What new grapes, trends or wine regions will we be following in

the years to come

Moderator: Kevin Articks, executive director, Maryland Wineries

Association

Panelists: Ed Boyce, founder, Black Ankle Vineyards; Tom Shelton, owner and winemaker, Bordeleau Vineyards & Winery;

Dave Collins, co-owner, Big Cork Vineyards.

12 - 1:15 p.m. Lunch. Join fellow attendees and Maryland winemakers at an

elegant lunch using fresh, local Maryland ingredients paired with select Maryland wines in a guided tasting. Please give your sever

your colored card for lunch.



Wines served at lunch: Great Shoals Winery • Spencerville Red Harford Vineyard • Vintage Vidal Blanc 2010

1:30 - 2:15 p.m. Session IV: Tasting Maryland's Future (Tremont Hotel) Maryland has many distinct environments ranging from west to east, with each set of site conditions providing opportunities and challenges to quality grape and wine production. Therefore Dr. Fiola's viticulture and enology R&E program concentrates testing the varieties imported from the fine winegrowing areas of the word that have climates similar to the diverse regional climates of Maryland.

> The varieties are planted at the 4 regional research vineyards the western mountains, CMREC on the Southern shore, and 2 site on the Eastern Shore. This provides the best varietal/ environment pairing opportunities that need to be tested and exploited for each unique region. Small batch winemaking studies of the varieties are conducted and evaluated (university and industry), which ultimately results in regional winegrape variety recommendations.

Dr. Fiola will pour three pairs of wines; two whites, two reds, and two dessert wines, that are made from grapes (or new processing styles) he has been conducting research trials with that he believes will perform well in Maryland

Moderator: Joseph A. Fiola, Ph.D. Specialist in Viticulture and Small Fruit, University of Maryland Extension





3 - 6 p.m. Grand Tasting & Twitter Taste-off presented by Bottlenotes (The Warehouse at Camden Yards) Light fare sponsored by Rifkin, Livingston, Levitan & Silver,

LLC - Maryland's Local Law Firm

Buses will begin leaving promptly at 2:30pm for the event. Buses will continue shuttling until 6:30pm. Buses sponsored by Maryland Office of Tourism

At 4 p.m. the public will be allowed into the event. Light fare

Dinner on your own in Baltimore. Please see a list of specials and discounts for more information

9:30 - 11 p.m. Saturday night hospitality suite 9:30-11pm. Room TBD Sponsored by Atlantic Seaboard Wine Association (ASWA)









MWA used lists provided by the Drink Local Wine Conference board members to invite past guests to the conference. Briana Berg obtained a list of local food and wine bloggers and writers from Visit Baltimore, the Greater Baltimore region's official non-profit, destination development and marketing organization. The list provided gave MWA the resources to research prominent Baltimore and Maryland members of the media and determine their value to the conference. MWA based its decisions on the reporter's beat and prior interest or coverage of local agricultural products in the Baltimore and Maryland community.

MWA also invited employees from organizations that support local wine. These companies came recommended to us from the Drink Local Wine board. Drink Local Wine had also invited them in previous years. This included Nomacorc, The American Wine Society, and Atantic Seaboard Wine Association. They attended the conference as sponsors, both as in-kind and monetary.

Below you will find a listing of VIPS. Briana Berg, Kevin Atticks, and Jade Ostner are staff at the Maryland Wineries Association, and were included in the total VIP headcount because they attended



and hosted each of the VIP events to represent the industry.

Attendees represented traditional media, wine associations, food and wine bloggers, university staff, and others interested in promoting local wine. Examples include: Virginia Wine Time, The Passionate Foodie, Foodservice Monthly, Atlantic Seaboard Wine Association, Bmore Media, East Coast Wineries, Sterling Publishing, BeWineWise; Swirl, Sip, Snark, Scranton Times Tribune, Baltimore Fishbowl, Empty Bottles Blog, Wine-Compass.com, Wine America, Wannabe Wino, Richard Leahy's Wine Report, Washington Post, Wine Line, Drink What You Like, Maryland Life, WBJC Word on Wine, Weekly Wine Pick, WYPR, Chief Wino, The Wine Trail Traveler, Wine Review Online, City Paper, Style Magazine, New York Cork Report, The Harrisburg Patriot-News, Balzac Communications, The Terroirist.

We chose to go to Sugarloaf Mountain Vineyard, Black Ankle Vineyards, and Boordy Vineyards, because of their focus on growing the highest quality—and diversity of—wine grapes in the Maryland wine industry. Their selection showcased three distinct growing regions in Maryland, and allowed guests to compare wines made from our regions' grapes.

The MWA and the Maryland Department of Agriculture (MDA) both marketed the event. MDA reps were incredibly active in promoting the event. They were partners throughout the conference and even attended. We were able to use their logo on all materials, including the Web site, which helped to support the conference concept. MDA ran a social media campaign that helped gain publicity pre and post conference. The Maryland Office of Tourism and Visit Baltimore were helpful in the planning and promoting of the event. WineAmerica, the national trade association of wineries, assisted in promotion of the programs and will assist with attracting national media representatives. Maryland winegrowers and other specialty crop producers assisted in the

After conducting a participant survey, we were able to see the direct affect that the conference made on individual attendees. Nine attendees submitted completed surveys—a 7% response rate; they represented media, trade and sponsors—all who participated in every aspect of the conference. Participating attendees noted their favorite wine that they tasted, their new knowledge of the regions' grapes, and the increase in world-class wines being grown and produced. Every participant noted that they learned something new about Maryland agriculture. The top-rated aspect of the seminars was the research session hosted by the University of Maryland Extension Viticulturist Dr. Joe Fiola, which showcased up-and-coming varieties and blends.

For the entire two days, 2,616,565 Twitter impressions were recorded directly tied to the event. We gained at least 300 quality followers, and #mdwine was trending on Twitter. Traffic to the marylandwine.com—including the micro site for the conference—doubled. Bloggers and media all noted a better understanding of Maryland's growing climate, geography, and fruit production abilities.

We also made sure that all meals during the conference featured local produce and other local agricultural products. Lunch by Woodberry Kitchen, dinner by Waterfront Kitchen, and lunch by the Tremont Suites Hotel, all used local ingredients.

While other agricultural producers contributed to the event, the focus was on specialty crops—most notably grapes and apples used for wine and cider. Other specialty crops were highlighted by the chefs who participated in the tour and the conference. Local root vegetables and greens were highlighted in the lunch and dinner on the media tour, and again at lunch during the conference. We sought external contributions to cover the purchase of other products. We instructed all wineries to ensure their focus was on the specialty crops inputs that produced their wines, which made its way into most Twitter posts about the wines.

#### **GOALS AND OUTCOMES ACHIEVED**

### **Goals/Accomplishments**

Goal	Outcome
Encourage social media chatter and discussion about Maryland grown fruit and the wine it produces	We had almost 3 million impressions on Twitter during the two-day event, and many more after the conference.
Recruit influential Twitter followers	We increased our followers of @mdwine Twitter handle by 300 quality users. Before the event we had 3,153 followers to our Twitter account. Today, we have 3,453.
Create opportunity for trackable social media chatter	We doubled the number of tweets using #mdwine hash tag.
Increase traffic to MarylandWine.com	Double (from an average of 16,000 unique visits per month) website traffic over the duration of the program, including the micro site <a href="https://www.marylandwine.org/dlwc13">www.marylandwine.org/dlwc13</a> . March visits 11,146; April visits 18,460; May 23,294—indicating a more than doubling of regular monthly visits since March.
Create good relationships with, and educate bloggers and media on our growing patterns	All participants who took the survey noted an increased knowledge of Maryland wine and grape growing.
Build following for the Maryland's Best Program	We included Maryland's Best hashtag in half of the tweets from the project. The MDA representatives were active in the hyping of the conference. MDA also ran a social media campaign.

# **BENEFICIARES**

The grape growers and wineries all benefitted from the conference. The focus of the conference was on Maryland grapes. The tastings and tours provided a hands-on experience with local Maryland grapes, and the seminars provided informative information and facts.



All 80 growers of Maryland grapes and all 64 wineries in the state benefitted from the project. Throughout the locally-focused meals, at least 15 farmers or producers were highlighted. Other beneficiaries include local restaurants, the city of Baltimore, tourism in Baltimore City and Montgomery, Frederick and Baltimore counties. The conference focused on supporting local artisans and vendors as well. Our conference gift bags, and all items in the hospitality suites were donated from local artists, vendors, and producers. By doing this, we were showcasing more Maryland products.

#### **LESSONS LEARNED**

From this project we learned that Maryland wine is in high demand. People are interested in local wine but have trouble accessing it and learning about it. They also don't know much about grape growing in Maryland. From this, we plan to implement social media campaigns and participating in more events targeted towards expanding Maryland wine's fan base.

During the conference, we planned to take a boat trip across the Chesapeake Bay. The forecast one-week out was not favorable and we did not want to put our guests in danger. Several captains advised us that the trip could be treacherous for passengers, so we expanded our bus tour and invited a number of additional growers to pour their wines at each of the stops, ensuring that a maximum number of growers were showcased to the media on the bus tour. Other vineyards that would have benefited from the boat/bus tour were showcased in other parts of the event to compensate.

In the proposal we aimed for 8 million impressions; while this was a very high objective for us to reach, we are very satisfied with the 2,616,565 that we achieved. One serious lesson we learned is that our farmers were generally not "digital natives"... the concept of Tweeting was not one with which they were comfortable, nor had most established Twitter accounts or account activity leading up to the event. Upon analysis of the Twitter Impact Report, it became clear that very few of the farmers and wineries represented made use of the medium to amplify and make best use of the activity generated from the event. Thus, the impact of Twitter was tempered.

To increase the number of impressions, MWA would have needed to open up the Twitter Taste Off to more people. MWA opened the event up to about 500 people. A larger space would have allowed MWA to make the event longer to attract more people. The venue for the Twitter Taste Off—The Warehouse at Camden Yards—was an incredible attraction which helped bring new attendees to the event. However, it was expensive and we would consider other attraction/venues—perhaps ones locally-owned and operated—for future events.

The event sold out on Groupon within days, suggesting that a wine event in March or April would be popular. We intend to run some event in 2014 during this time frame.

The cost of the conference fee was also high. If MWA could have lowered the fee, more people may have attended. More attendance to the conference would have also led to more impressions and more publicity.



# **CONTACT PERSON**

Kevin Atticks 410-252-9463 kevin@marylandwine.com

# ADDITIONAL INFORMATION

News clips generated from the event included <u>The Washington Post</u>, <u>Colorado Wine Press</u>, <u>Baltimore Sun</u>, <u>New York Cork Report</u>, <u>Patriot-News</u>, <u>BmoreMedia</u>, etc.





DLW Participant Survey
1. What is your name?
2. What is your affiliation?
3. Which part of the media tour was your favorite?
4. Which part of the media tour was your least favorite?
5. Which meal - out of the two-day conference - was your favorite?
- This is the day of the tree and your later to
6. Which seminar did you enjoy the most?
o. Which selimar are you enjoy the most:
7. What did you find most surprising about Maryland wine?
7. What did you find most surprising about maryland write:
8. Describe the quality of the seminars, including: topics, speakers, etc.
o. Describe the quality of the seminars, including, topics, speakers, etc.
9. How was the hotel? Both your room and conference rooms?
9. How was the noter? Both your room and conference rooms?
40. Which refer did you like the most?
10. Which wine did you like the most?

#### **FEATURES**

# Step OUT for the Drink Local Wine Conference

BMORE STAFF | TUESDAY, APRIL 02, 2013



LOCAL WINE

#### RELATED IMAGES



What: Drink Local Wine Conference

When: April 13

Where: Tremont Suites Hotel & Grand Historic Venue Cost: \$125 for the conference; \$40 for the Twitter Taste-

-

ENLARGE

RELATED TAGS

EDUCATION, ENTERTAINMENT, HOSPITALITY, VISIT BALTIMORE

DOWNTOWN

"In too many places, local wine is still treated as a novelty. It's about time regional wine gets the respect it deserves."

That's from the brochure of the <u>Drink Local Wine</u>
<u>Conference</u>, to be held this month at the Tremont Suites
Hotel & Grand Historic Venue. More than 20
Maryland wineries are participating in the April 13
event, which includes several panel discussions and a
Twitter Taste-Off, where participants will Tweet their

thoughts on the region's wines. Guests will sip wines from Black Anke Vineyards, Boordy Vineyards, Woodhall Wine Cellars and Basignani Winery.

Washington Post wine columnist and <a href="DrinkLocalWine.com">DrinkLocalWine.com</a> co-founder Dave McIntyre will moderate a discussion on whether Marylanders appreciate their home-grown wine, and if not, how to get the message out. Richard Leahy, author of "Beyond Jefferson's Vines" will recount the history of Maryland wine from the 1940s to the present.

Subscribe

GIVE US YOUR	R EMAIL AND	WE WILL	GIVE YOU	OUR	WEEKLY	ONLINE
MAGAZINE, FA	AIR?					

# Maryland Wine – The Warehouse at Camden Yards

\$20 for Wine-Tasting Event at The Warehouse at Camden Yards on Saturday, April 13, at 4 p.m. (\$40 Value)

